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STUDYING CHILDREN IN SCHOOL

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CHAPTER I

INTRODUCTION

Human beings have always been interested in themselves and have been ingenious and indefatigable in framing theories of their own origin and destiny. From earliest times these theories have been expressed in terms of mythology and have represented rather fantastic guesses. It has only recently been recognized that human nature and capacity can be investigated objectively. This investigation has been concerned principally with body form and structure, with physiological function, and with mental activity. It has been directed primarily toward adults but increasingly, in recent years, has taken account of the immature and the aged, also.

Charles Darwin, in his work on the origin of species and the descent of man, turned the attention of students of man to early stages in human development. Resemblances in the embryonic body form and structure of man to the anatomical configurations found in lower vertebrates, as, for instance, the occurrence of gill slits in the human embryo, made it easy to accept the "recapitulation" hypothesis. It was the hope of investigators that the tantalizingly evasive story of how man had come to be Man might be traced by following a fertilized egg through the process by which it becomes a human being. This plausible guess led speculative biologists and educators of the eighteen seventies and eighteen eighties into fantastic interpretations of human development; but at least it served to give great impetus to the study of embryology, prenatal life, early infancy, and adolescence. Darwin himself made careful and detailed observations of the behavior of his infant son, thus setting the fashion followed by a distinguished company of scientifically interested fathers, mothers, and maiden aunts, who have given us biographic studies of single children. The Sterns, Preyer, Miss Shinn, Mrs. Fenton, and others made careful, intelligent, and sympathetic descriptions of infants in their own families.

Fired with zeal for the scientific method of the psychological laboratory of Wundt, G. Stanley

Hall felt qualms as to the soundness of conclusions based on observation that was obviously colored by feeling and that ordinarily dealt with only one case. He sought to increase the validity of the results of child study by collecting information from studies of a large number of cases. To this end he enlisted college students, who were asked to draw on their recollections of childhood but who quite humanly drew largely on their imaginations. He also obtained the cooperation of mothers and of teachers, who made direct observations of young children according to schedules devised by Hall and his students at Clark University. From 1883 to 1915 this type of study flourished under his vigorous and enormously stimulating influence. His graduate students held leading academic posts and founded clinical services for youth. The modern conception of a child welfare institute where investigators of diverse scientific training and interests concentrate their forces in a united attack on problems of human development was clearly formulated in his writings. The need for relating child study to child welfare was apparent to him; 20 years after his early efforts to bring this about he writes mournfully:

The organization we here effected [a conference for child research and welfare], however, had little appeal to those intent chiefly on the immediate, practical work of mitigating abuses and ameliorating the conditions of childhood, so that research and welfare again showed their incompatibility and it was realized that the latter had little interest in the former, and the two drifted apart.*

Of the voluminous and laborious publications of this child study movement little use is now made. These studies were weak in their methods of collecting data and still weaker in methods of handling the data collected. The refinements of the interview and questionnaire that were being developed

* Hall, G. Stanley, "Life and Confessions of a Psychologist," p. 401, New York, D. Appleton-Century Company, Inc., 1923.

in France by Binet and Simon gave clarity, reliability, and validity to their data which Hall's work never attained. Galton, Pearson, and their students developed statistical techniques that greatly facilitated both the handling of data and the evaluation of its worth and significance. Along with these improvements in method there developed a realization of the existence, scope, and extent of individual differences among men; a fresh appreciation of the range of human variability; and a beginning understanding of the interplay of traits and multiple causation of human behavior that underlies our use of the term "the child as a whole."

In consequence of these advances in philosophy and method, it became obvious that serious observational or experimental study of development was not be accomplished by enthusiastic amateurs. John B. Watson, in that same department of psychology of Johns Hopkins University that G. Stanley Hall had founded, undertook observations under "controlled" conditions of newborn infants in the hospital nursery. In 1919 he published his famous observations on Albert, his rages and fears and loves. This brief paper had an almost incredible influence on genetic psychology; on the narrow base of its premises the behaviorist school arose and flourished. From the work of this school students of children learned to ascribe due importance to stimuli as productive of responses and to pay more attention to those persisting associations that Watsonians described as "conditioned responses."

However, in the 20 years since Albert reacted so satisfactorily to white rabbits and crumpling paper and all the rest, it has become obvious that it could not be considered that his behavior encompassed the gamut of human potentialities for feeling and action, that maturation makes new reactions possible and probable, that stimuli acquire different valences, depending on the various physiological states in which they happen to impinge on the reacting organism. To a well-fed dog a juicy bone is not what it is to a hungry brute. This elementary concept has been overlooked in much experimentation. Students of children must try to describe precisely not only the range and quality of the stimuli presented but also the organismal state on which these impinge.

It has long been known to psychiatrists and social psychologists that "organismal state" varies widely

in varying social situations. A little boy in a mob of girls, a little boy with a herd of big boys, a little boy in a crew of lads still smaller than he, is not at all the same little boy so far as possibilities of feeling and action are concerned. The permutations and combinations possible are endless and evasive. This recognition of the role of the social milieu in influencing human reactions forced the consideration of so many complicating factors that the whole undertaking began to seem oppressively laborious, elusive, impractical. None of the important practical questions could be answered yes or no, and the questions that could be answered definitely seemed unimportant.

During the last two decades public and private agencies have given financial support to the study of human beings, and the stimulating leadership of distinguished men and women from the related sciences and fields of social welfare has been available. Institutes have been established and long-term cooperative studies of representative groups of children have been prosecuted with energy, skill, and intelligence. Applying a schedule of data collection to a carefully described sample of children during the major portion of their developmental span gives promise of results that will be more coherent and more useful than earlier findings. These present-day investigations are going on in close contact with groups of parents, teachers, and clinicians, who are constantly reviewing the research findings for possible practical applications and just as constantly tossing new problems into the laps of the investigators. As one hard-pressed psychologist put the case: "The demand for knowledge in this field far exceeds the supply."

It is true that 50 years of ardent cooperative pursuit of scientific knowledge of children's behavior has not brought recipes for "paediculture"; but it has shown us that children are resourceful, courageous, competent, and delightful as they build themselves, educate themselves, enjoy themselves and the whole round world. All most of them need is a chance. Original sin, if any, is seen to be in the time, the place, the direction, and the degree of the action performed, rather than in the essential nature of men or in the universe that sustains them. "There is," to quote the wise and humane saying of George Stoddard, "a certain amount of grief that goes along with being human." But we have learned from the study of child development that our common resources for reducing the grief and

increasing the joy of living have scarcely been touched, much less exhausted.

Out of the mass of investigations in all the sciences touching human life has come this changed conception of human nature, of its assets, liabilities, and potentialities generally. With regard to the mass of desirable traits that can be encouraged, of undesirable ones that can be minimized by the situations in which the children are placed, we are learning to think of children as "becoming" rather than as "born that way."

Everywhere in European civilization there has been great interest and activity in extending scientific knowledge of child development and in putting this knowledge to work for many purposes. This interest does not flourish in strongly nationalistic states. Men know very well how to shape children in a common mold by education organized to that end. But how to release the gifts of each unique citizen for the good of all, himself included, is not yet well known or practiced. However much our knowledge in this field may be extended and refined, practical action is always on a trial-and-error basis. The builder of bridges, for all his mathematics and engineering, is framing an hypothesis when he plans his bridge; the more accurate and skillful he is, the better will be his hypothesis, and the more chances it will have of standing justified in steel and concrete. It is wearisome for the builder and the onlooker to speculate about the soundness of the hypotheses embodied in his plans for bridges; but it is much more wearisome for parents and teachers and judges and social workers, to speculate about the soundness of our hypotheses concerning education, the bridge on which every child travels from what he might be to what he becomes.

Because we are all eager to be sure we are doing the right thing for children, we grasp at every hint that carries the magic endorsement of "scientific." The commercial use of research in this field is prompt and extensive; child welfare, along with romance, possesses sure-fire box-office and advertising appeal.

Every aspect of formal education, from administration and finance to curriculum and class management, has been touched and changed by the diffusion of knowledge of child development into official circles. But so far child study has had its most successful application in the field of educational hygiene. Learning to think in organismal

terms has forced us to give a place to body well-being and soundness, hygienic environment, and medical supervision of growth and development. Results here have been gratifyingly recognizable, prompt, and fairly predictable. Improving nutrition, getting rid of tonsils, adenoids, and infected teeth, fitting glasses, and taking care of orthopedic defects have proved useful measures. Better environmental hygiene is still to be desired, but the last 10 years, in spite of the depression, have seen real advances in this respect. Cross lighting and glare are far less common in the schoolroom, the common towel and drinking cup are almost extinct, school lunches are legitimate objects of intelligent concern; open-window ventilation and air-conditioned comfort have taken the place of the malodorous hot-and-cold classroom of 30 years ago. Sound deadening has recently contributed to reduce the roaring-lion decibels of a progressive schoolroom more nearly to the cooing-dove level of a Quaker meeting. There is still much to be done that we already know how to do, and do well, to make school environments wholesome for the eyes and ears and bodies of children. But there has been a good beginning; the public has become health-conscious to some extent. The sins that are still being committed in the respects just mentioned make us uncomfortable.

Until the present, educational philosophers have made small use of knowledge of human development in their formulations—perhaps because the basic principles of educational philosophy have been presented chiefly by students of "society" rather than by students of human nature and human development. Increasing knowledge has emphasized the ability of a human being to direct his own feelings and actions and thereby secure his own welfare and that of his fellows. This recognition of the responsibility, competency, and worth of the individual is implicit in our democratic ideals of society, in many religious ideals, and in our educational philosophy. Observation of children and youth has put a solid underpinning of concrete evidence beneath these ideals. But the educational philosophers have shown slight recognition of the maladaptive aspect of human conduct. Study of human behavior has established our capacity for going wrong, for destroying the well-being of ourselves and our fellows. Such action is based on ignorance or misinformation, is set going and driven forward by excessive or misdirected emotional reactions.

Observation has shown also that, when sound knowledge is available, actions can be more wisely directed and that we tend to act on what we know, provided that our understanding is not warped by mistaken attitudes and emotions. It is apparent that something can be done to rectify the latter failure and bring our feelings in line with the facts of the case and our own best interests. This can be accomplished in part by gaining insight into our own states of mind, their origins and their probable futures.

These conclusions, based on work that is incomplete but full of promise, are stirring educators to examine the stores of knowledge accumulated by the race, in search of material useful in the conduct of life, knowledge from which wisdom and understanding may be distilled by experience and reflection. The inclusion of this material in the curriculum is not a dubious addition of nonessentials but the only sensible and reasonable course to pursue.

One of the major obstacles to full use of this material is the mass of irrelevant but attractive topics that have traditionally been presented to the young and that fill their heads and hands and days so full of learning that there is little place for the knowledge and skills they will need in managing their lives. Another and more serious obstacle is the inaccuracy and incompleteness of much of our knowledge and many of our generalizations about mankind. The human race began objective and critical studies by considering the starry heavens, farthest removed and in some ways least significant for the conduct of human lives; the youngest and least well-organized sciences are sociology, psychology, and anthropology, concerned with man himself. It is painful but true that most of what we need to know about ourselves has not yet been found out. But we are at last collecting and organizing information as to human nature and capacities. The new education is committed to giving children and adults whatever knowledge is available and equipping them with standards for critical evaluation of all that is presented to them for acceptance. These applications to education from the field of human development are shown in the inclusion of such topics in science and social studies and in the development of new courses the major purpose of which is to give students a better understanding of themselves and others.

We have gone further in applying knowledge of human nature in our methods of teaching than in our choice of material to be taught. The recognition of individual differences started with recognition of differences in intellectual abilities and resulted in efforts to adapt both subject matter and teaching procedures to these. We have gone on to recognition of differences in many other traits, even in rate of development itself, and have attempted by segregation, by individual assignments, by remedial classes, and by a host of other devices to facilitate learning. Better understanding of maturation and sequence of development has directed our attention to discovering a child's readiness for new opportunities and new experiences. Intensive study of the ways by which human beings learn has given us better methods of drill. Most important of all, the psychology of learning has made us recognize that learning is the product of the organism's own activities, so that we no longer stress "teaching" procedures but speak rather of "learning" activities. First-hand observation and contact with things in the classroom and in the community have taken the place of purely verbal memorization since we have learned that words without experience are meaningless. Clearer understanding of the importance of interest and of social support has led to realization of the value of individual and group projects, of committee work, of group planning. Studies of transfer of training and the fallacies of formal discipline have led to direct attack on problems of interest to students. These and dozens of other illustrations show the influence on methods of teaching of the study of human beings, especially the study of the ways by which they learn.

This influence has operated not only to facilitate learning but to safeguard the learners from the effects of half learning and misunderstandings likely to lead to ill-judged conduct. Such safeguards are all the more essential if we are to expand our curriculum to include the material referred to above, drawn from our new knowledge of human nature and chosen specifically to enable pupils to direct their own conduct and manage their own lives more successfully. Recognition of the principles of individual differences, of maturation and sequence in development of abilities emphasizes that not all material is suitable for all levels of ability and development; that for some pupils learning to guide conduct by maxim and drill

rather than by understanding is still the method of choice. The force and significance of social support and social control in all our conduct and learning is beginning to be recognized as especially important in connection with methods of presenting topics of critical human import, such as human relationships, race problems, communicable-disease control, race betterment. We are already using discussion and community contacts as learning activities. We shall need in the future to use such group interaction to greater extent and with greater cognizance of its values and dangers.

Consideration of these and many other effects on education of scientific knowledge of human development convinces us that no teacher can count himself prepared for the practice of his profession unless he has some understanding of this field. The practical comprehension that is needed cannot be got merely by reading books on child hygiene and child psychology. That any useful understanding is the fruit of the direct study of individuals is generally recognized. Opportunities for this kind of study have been sought in various ways: through published reports of case studies; through arranging for students to attend child-guidance clinics and case conferences. This book offers as a supplementary procedure a plan for making studies of children from the pedagogical standpoint.

We have no widely accepted word for such studies. The Russians have made use of various derivatives of the Greek root from which our word "pedagogical" comes. G. Stanley Hall spoke of "paido-centric" studies. "Personality" studies would seem to come nearest our purpose, but the term refers generally to clinical studies rather than to pedagogical ones. Gesell used the term "normative studies" for descriptions of children in which motor skills, language, personal-social and adaptive behavior are considered. This involves a confusing double use of "norm" to mean that which is sound and wholesome and also that which is found in the middle half of a "normal" distribution of any given trait. It seems that "developmental reports" is the most accurately descriptive title for the type of study here proposed.

These reports do not qualify as research studies. Research in this field today calls for preliminary training in technical skills that goes far beyond the legitimate field of the teacher as a teacher. The plan proposed is not one for gathering data to serve as a basis for sweeping generalizations about child

development but for the more useful application to the education of individual children of existing generalizations. In turn, the study of individual children makes more concrete and vivid the knowledge gained by reading the literature in the field.

These developmental reports on children as wholes do not attempt to assemble all conceivable kinds of information about an individual. This latter procedure leads to magpie collection. A picture of a child is not to be made by heaped-up facts and near facts about him. Much research effort has been devoted to determining the most significant facts and opinions to use in forming a just estimate of a child or an adult. Many kinds of measurement, rating, description have been shown to be of slight usefulness, some because they are not valid, some because they are highly subjective, and some because they seem to add little to our understanding. Because a human being is a unified organism, almost any fact about him sheds some light on him considered as a total personality; but we can reach a point of diminishing returns, where new facts of the same general kind add nothing to the picture.

These studies are planned for those adults who carry responsibility for children as wholes, growing up as best they may, with and without the attentions of specialists. They are not intended for those who are typically interested in just one aspect of a child, the occlusion of his teeth or the pronation of his feet or the level of his I.Q., or the peccadilloes of his summer's holiday.

Studying a child as a whole means essentially studying him with regard to his success as a human being and in relation to other human beings. Not only his handicaps but his adjustment to them, not only his abilities but his management and utilization of them are to be considered. The first step is the collection of data. The data required can be gathered by any alert observer who also has access to the technical reports of physician and psychologist and other records ordinarily found in schools. The study as outlined does not require a personal interview with the child studied, nor does it call for the kinds of information as to home and personal affairs that violate a child's privacy.

Putting together all that is seen and read about the child studied is the second step, and a more difficult task than collecting the information. This step calls for reflection, evaluation, and hypothesis by the use of scientific imagination. It is aston-

ishing how much sympathetic understanding and acquaintance with a child can be gained from reflection on a careful sampling of information.

As teachers and parents we are vitally concerned with the question: How well is this child succeeding? The synthesis that these developmental reports call for does not aim at praise or blame for child, school, or parent. It is safe to assume that all are doing the best they can under the circumstances. The only profitable questions are not who is to be blamed or praised but what additional opportunities can be used by the child? What stumbling blocks can be shoved out of his way? How can he be roused to fuller use of his own powers? The answers to these questions constitute recommendations to school and home, carefully arrived at and worth consideration. The suggestions thus made for a child's home routine, school program, personal development, and social life suit the traits the child has shown rather than those his parents and teacher may wish he possesses.

Such studies of individual children are a good corrective for the tendency to deal with a child, or any other human being, on the basis of his most obvious characteristic. This is the easiest way, but a careful attempt to understand just one child brings home to us the multiple-factor causation of behavior. It does not permit us to think of him

under one of our many stereotypes: "an only child," "a red-head," "a gland case," "a child-from-a-broken-home." We learn, more deeply than by mere word learning, that description of one or a few traits never describes a child or an adult. We get enlightening glimpses of the way in which disturbance in one part, such as lack of sleep, attempts to change handedness, a feeling of inferiority to others, the wear and tear attendant on straightening teeth, to quote a few of the commonest, may affect the whole organism. We can never forget the emotional component of all learning nor ignore the influence of his status in the group on a child's feeling about himself and on all his activities.

Both legally and morally, teachers and parents carry heavy responsibility for children. Whether we know what we are doing or why we do it does not alter this fact. Practice in child study, however crude and inadequate, is useful to us and to the children we help or hinder or neglect. We are enabled thereby to plan their immediate environment more intelligently, to safeguard them against avoidable handicaps of body and spirit. Most important of all, we can hope to come nearer to being fair and just with them, to learn to think of them and ourselves neither harshly nor sentimentally but as we ought to think.

CHAPTER II

BASIS FOR DESCRIPTION AND APPRAISEMENT OF CHILDREN BY PARENTS AND TEACHERS

Because of the enormous complexity and long life span of the human organism, an attempt to bring together a complete description of any one person falls of its own weight of detail. Describing the whole of a person is not essential, however, to describing a person as a whole. To estimate a child's well-being not in terms of body, mind, spirit, emotions, endocrines, nutrition, temperament, complexes, fixations but in terms of himself as a whole is a common-sense procedure, but one with which specialists have not much concerned themselves. It is only recently that we have begun to have the kind of knowledge of children on which techniques for describing them as wholes may be based.

When we undertake to collect all available information concerning a single person, we find ourselves handicapped by the fact that the various items recorded about him have generally been contributed by different specialists, each interested in only one aspect of the individual's personality. In the present state of knowledge, some of these facts help us very little toward better understanding of a child as a person, however interesting they may be as research data or for special studies. What the student of children needs is a selected

list of items on which information can be ordinarily obtained without too much trouble or expense and for which the significance in a child's life can be more or less certainly pointed out. The outline given herewith (page 8) is a tentative answer to the question: What is most worth while paying attention to, when we are trying to get a reasonably clear and just understanding of a child for whose educational guidance we must take responsibility?

As a further aid to the student, a tabular summary based on this outline (pages 9-24) has been prepared, giving for each aspect to be considered a basis on which we may formulate our impressions and pointing out in brief and incomplete fashion the possible significance of each aspect for understanding the child studied. Extensive experience, reading, and reflection will enable anyone to enlarge and improve these statements. Perhaps their chief service is to stimulate the reader to disagreement and to amplification. At all events, these tentative statements will emphasize the fact that every item of information about a child has potential significance for that child's whole life and personality and therefore should be scrutinized, without prejudice, in search of that significance.

DESCRIPTION AND APPRAISEMENT OF A CHILD IN HIS ENVIRONMENTAL SETTING*

A. As an individual

I. General impression

1. Personal attractiveness
2. Clothing
3. Facial expression
4. Expressive movements
5. Voice
6. Bodily repose
7. Endurance
8. Size and build
9. Posture and gait
10. Manipulative skill
11. Communication

II. Developmental progress

12. Growth in size
13. Body proportions
14. Organ maturity
15. Body management
16. Language
17. Emotional control
18. Attention span
19. Problem solving
20. Orientation
21. Intellectual abilities
22. Self-direction
23. Use of time
24. Social responses

III. Health status and history

25. Bony structure (head, teeth, limbs, chest)
26. Metabolic efficiency (condition of hair, eyes, skin, mucous membranes)
27. Musculature
28. Respiratory tract (nose and throat, chest)
29. Hands and feet
30. Vision
31. Hearing
32. Heart
33. Weight for height, type, and age
34. Reports of diseases and immunizations
35. Reports of focal infections
36. Reports of allergies
37. Reports of endocrine unbalance

B. As a descendant of family stocks

I. Family record

38. Nationality
39. Health
40. Education
41. Occupation
42. Special interests
43. Achievements

C. As a member of groups

I. Family group

44. Members of household and their relationships
45. Economic conditions
46. Interests of parents
47. Attitudes of parents toward home and children
48. Attitudes of parents toward school
49. Religious and social affiliations
50. Influence of group on child

II. School or play group

51. Size and composition
52. Management
53. Achievements
54. Influence of groups on child

D. As related to his physical environment

I. General environmental conditions

55. Air
56. Light
57. Space
58. Sounds
59. Equipment
60. Neighborhood

E. Estimation of success

61. Personal care and health maintenance
62. Satisfaction in work, vocational plans and activities
63. Social conformity in essentials, participation in family life
64. Sound attitudes toward things in general and toward self; satisfaction in relationships with nature, in human relationships
65. Personal tastes and interests rich and varied

*Topics are numbered throughout the workbooks consistently with the numbering used here.

DESCRIPTION AND APPRAISEMENT OF A CHILD IN HIS ENVIRONMENTAL SETTING

A. As an Individual

I. General Impression.

1. **Personal attractiveness.** Striking features of face or figure; robust or delicate; healthy or unhealthy; alert or languid; vigorous or weak; breath pleasant or otherwise; coloring.

2. **Clothing.** Becoming; suitable; clean; attractive; in the current fashion. Shoes of correct size, suitable type; heels run over or even.

3. **Facial expression.** Alert, happy; winning, shy; dull, unresponsive; sad, discontented, wistful.

4. **Expressive movements.** Smiling, laughing, crying, sobbing, screaming; rare or frequent.

5. **Voice.** Pleasant or harsh and shrill, high pitched or low, loud or soft, clear or mumbling.

6. **Bodily repose.** Child is comparatively free from senseless activity or is continually twisting body, tapping hand or foot, contorting face, handling things aimlessly, running about, or looking around; chews hand, lip, or pencil; picks and scratches at his own body.

7. **Endurance.** Child is able to indulge in ordinary activity as long and vigorously as others of his age without undue fatigue.

The general impression which a child makes gives us significant clues as to the child's relations to himself and others, his general health and well-being, his home situation. The responses of other persons to an attractive child are favorably conditioned by the first impression which he makes upon them. This attractiveness may be an accident of coloring, expression, or voice; or it may be largely due to well-chosen clothing. Even more important for the child than the effect of his attributes on other persons is their effect on his own estimate of himself. A sense of being different from others, owing to minor disfigurements, motor disabilities, outmoded clothing, may influence the child's estimate of his own worth. His posture, gait, expression, voice, bodily repose, endurance may reflect this opinion of himself. They also tell us something of his general health. Speech, clothing, manners give some evidence as to his home background and the care and taste expended on him by his elders. This is more nearly true for young children than for adolescents. It is true to a limited extent only in the case of adults.

8. **Size and build.** Tall, medium, or short in stature; pyknic, average, asthenic as to proportions of trunk length to neck and limb length and of body weight to height; heavy (stocky), medium, slender as to bony frame.

Differences in abilities and to some extent differences in attitudes accompany differences in body build. A short child cannot reach so far; he is at a greater disadvantage in some games than a taller child. Very tall children or very short children are apt to feel their size a handicap. This feeling may prevent their establishing satisfying relations with other children and well-balanced attitudes toward themselves. The same is true for children who are extremely fat or extremely thin. Individuals of the pyknic type differ in several ways from asthenics and from persons of average build. The pyknic individual, whether his body type permanently characterizes him in adult life or merely illustrates a temporary phase in his growth, is apt to have more endurance than his asthenic brothers. There has been thought to be a relation between body build and personality types, individuals of pyknic type showing a dominant interest in the external world, in overt activity, in a somewhat larger percentage of cases than do those of asthenic build. The great majority of individuals fall in the middle group between these extremes.

9. **Posture and gait.** As seen in the posture of the child when sitting or standing; in his gait and manner of moving about. His manner may be graceful or awkward; effortless or strained; poised or careless and poorly coordinated; vigorous and effective or weak and ineffective.

Posture and gait, depending in part at least on the level of maturity of neuromuscular mechanisms, is in part a function of development. These developmental patterns are overlaid by more or less permanent modifications due to changes within the organism which have little to do with developmental status. Our attitudes and emotional tone are reflected very quickly in the way we walk and stand. Failure, discouragement, worry, shame cause us to hang our heads, walk limply, sink down in our chairs. Success and happiness are shown in alert expression, vigorous and elastic gait.

Fatigue results in a typical "fatigue posture." Convalescence after illness is marked by much the same unwillingness to sit or stand erect as is found in tired children. Seats of the wrong height and shape, clothing which is uncomfortable and restricts movement, shoes which are uncomfortable or throw the body out of alignment are all too frequent causes of poor posture. The tendency to consider all failure to stand erect as a matter of bad habit correctable at will is a mistaken one, particularly at the lower age levels. Young children who are rested, in good health, and happy will maintain good posture under ordinary conditions. When they fail, attention should be directed first to factors influencing their general well-being rather than to posture as such.

Older children may have "got the habit" of poor posture. Even during these years, it is still both educationally and psychologically unsound to rely for correction on admonitions to "stand up straight" and "throw your shoulders back."

10. Manipulative skill. Skillful or clumsy; sure or fumbling; graceful or awkward; ingenious or limited in range; well directed and effective or random and futile; exploratory movements much or little used.

Use of preferred hand established, or one hand used about as often as the other; child prefers right hand or left hand for skilled movements.

Ability in manipulation depends on developmental level, on past opportunities for learning, and probably also on innate differences in structure and ability. We should not expect greater manipulative skill than the child's age level justifies or than his past and present opportunities for handling objects permit. Such opportunities are most important in preschool and early elementary years but continue to deserve far more attention than we ordinarily give them among children of secondary school age. A youngster who exhibits pronounced lack of skill in manipulation is decidedly handicapped in development. He is likely to suffer from deprivation of experiences with objects, from lack of self-confidence, from dependence on others in problem solving, from recreational poverty.

Young children are apt to use either hand equally well in manipulation, but by the age of 3 or 4 the use of a preferred hand ordinarily is established. Whether this hand is the right or the left probably depends both on innate tendencies and on environ-

mental stimuli. A forced change from preferred use of left hand to use of right is sometimes accompanied by sufficient strain to the organism to be associated with difficulties in speech, in reading, and perhaps in other kinds of early learning. We know little of the effect of "changing-handedness" on subsequent manual dexterity. Consideration of the many persons of past generations who were compelled to use the nonpreferred hand and who lived to become efficient, well-adjusted members of society, skillful enough for all practical purposes, leads us to doubt the universal occurrence of ill effects due to change of hand.

11. Communication. Child responds to a wide range of stimuli by change of facial expression, or he maintains a stolid, blank countenance; he responds characteristically by smiles and laughter, by weeping and wailing, or about as frequently with tears as with laughter.

Gesture much or slightly used; favorite gestures.

Speech rapid or slow; with clear or blurred articulation; is free-flowing or hampered by stammering or stuttering; child speaks with the accent common in his group or with a noticeably different accent; he is talkative or inclined to silence; his vocabulary is wide in range for his age, or narrow; he has favorite "by-words" and slang expressions which are much or little used; uses nouns correctly, abstract terms intelligently; manner of expression is vague and careless or explicit and accurate.

Written speech fluent or halting; intelligible; statements organized or somewhat incoherent, logically arranged or lacking in sequence.

Child uses speech chiefly to create social impression or uses it to impart knowledge, secure aid, give commands.

Communication between persons is accomplished by a variety of responses, chiefly changing facial expression and posture, gestures, and vocalizations. This is one form of the general stimulus-response manifold characteristic of organisms.

Children vary in the amount and kind of overt action which they display in response to stimuli. Some pay little or no attention to distractions, some respond by a grave stare or a noncommittal phrase to efforts to engage their attention and interest, others smile or grimace, chatter and move arms, head, and whole body in vigorous gestures in

response to very slight stimuli. It is important to remember that the one who makes many overt responses is not necessarily the one most deeply interested and engaged. The silent, motionless child may feel more keenly at the time and remember far longer than his effervescent brother. The child who responds in friendly fashion is apt to arouse a friendly and sympathetic attitude on the part of others. The infant who responds by grimacing, yelling, kicking may not arouse a friendly feeling on the part of spectators, but at least he commands attention as a person with definite personality traits. The quiet child is apt to be ignored or to be given slight consideration in any critical situation.

These differences in response are undoubtedly in part due to innate characteristics, but it is plain that they depend to some extent on the satisfactions or lack of them which have attended the child's past attempts to become part of a social situation. Fear of being misunderstood, of being rebuffed, doubt as to one's ability, as to one's place in the interest and affections of those about, a general feeling of insecurity may lead a child to put on a stolid front, to refuse to let others see that he is attentive, perhaps even to try to persuade himself that he is not interested.

Communication by speech, both oral and written, depends fundamentally on maturity of neuromuscular mechanisms. Oral speech, in particular, is largely imitative. Accent, vocabulary, grammatical construction tell much of a child's family and playmates. Children who read a great deal sometimes show a tendency to use "story-book" phrases and to mispronounce words they have met only in print. Children vary in the ways in which they use speech: some make it their chief weapon in meeting difficulties, in commanding attention, in entertaining their fellows and themselves; others make much more extensive use of their growing language skills in gaining knowledge and in organizing their experiences. To still others, speech or vocalization of some sort is a favorite plaything.

II. Estimation of Developmental Progress: Comparison with Other Children.*

12. Growth in size. Size at birth; annual increments in height and weight compared with

* For characteristics of children at various ages, see Chapter III.

average for various ages and type; times of pronounced acceleration or retardation in growth, in relation to other factors in child's history.

13. Body proportions. Long neck and limbs or long trunk. Relative circumference of head, chest, and abdomen.

14. Organ maturity. Skeleton; teeth; circulatory organs; endocrine glands, particularly thymus, gonads, thyroid; sense organs; nervous system.

15. Body management. Changes in posture and gait, changes in speed and accuracy of movement, in strength; changes in ability to perform complex locomotor and rhythmic movements.

Although children of the same chronological age differ from each other, they are on the whole more alike than are children of differing chronological ages. If we can discover those characteristics most commonly found in ten-year-olds, for example, we have a better basis for understanding any one ten-year-old. Efforts to construct height-weight-age tables, to determine anatomical age on the basis of skeletal maturity, physiological age on the basis of maturity of circulation or reproductive functions, and mental age on the basis of performance of certain specified tasks are, at present, the most successful attempts at assembling age-level characteristics. Comparison of any child with others of his age and sex as to these and other less clearly defined points gives us help in planning his educational guidance to protect him from demands to which he is not ready to respond satisfactorily and to provide opportunities suited to the stage of development of his various structures and abilities. It is not necessary or desirable that a child should conform in any respect to the standards set by the average or the mediocre mean of his age level.

Growth is an extremely sensitive index of well-being. Rapid growth makes heavy demands upon the organism. The child who is growing rapidly needs more sleep and food, more protection from what may cause emotional or physical strain than the child of the same age who is not growing at such a rate.

Failure of a growing child to gain at his customary rate or any considerable loss of weight indicate need for medical examination and supervision of the child's routine.

Body proportions change with age and have a relation to the capacities of the child at any particular age (see *Size and Build*, page 9).

Various organs of the body mature at various times through the life span. We have as yet few reliable measures of their maturity. It is important to know for any particular child the skeletal development common at his age, the maturity of glands of internal secretion (gonads, thymus, thyroid), and the changes in heart and circulatory system which are probably occurring, the stages of development of eyes and of certain neuromuscular mechanisms on which particular functions depend. We may possess some few items of this information in regard to a child, but in general we do not have X rays, basal metabolic tests, etc., for school children who are not obviously ill and can only assume that what is true for most children of this age is true for any one individual.

In general, ability to handle the body effectively improves as children grow older, although there may be a temporary reduction of this ability during the parapubertal spurt of growth. Skill or lack of it should be interpreted in terms of a child's opportunities for practice and his level of development.

16. Language. Articulation and enunciation; vocabulary; grammatical constructions; functions of language in child's play, in his social and intellectual life.

Development in speech includes several aspects, such as the development of neuromuscular mechanisms which make articulation possible, the increase in number and kinds of words used, and changes in functions of speech, from the babbling of babies to the adaptive speech of adults in their more intelligent moments.

The high correlation between scores on vocabulary tests and on intelligence tests indicates that the development of vocabulary is closely related to intellectual development. In individual cases, instead of being properly ascribable to his inferior intellectual endowment, a child's restricted vocabulary may be the result of his having grown up in a foreign home or of his having had few experiences which called forth speech or perhaps of his partial deafness. A wide vocabulary well used means at least enough intelligence to master the words used and, in addition, opportunities for the cultivation of language either through reading or through the example and encouragement of intelligent adults.

Studies of the functions of speech are not so numerous or so definite as the studies of vocabulary. Development proceeds from the repetitious babbling of babies, which goes on without regard to the effect on the listener, to the use of speech to make known wants, suggestions, and questions. Children normally show increasing ability to use words as the symbols of abstract ideas and to formulate more and more complex generalizations as they approach maturity.

17. Control of emotion. Child shows immediate overt response to stimulation or a delayed or partially inhibited response; response appropriate or inappropriate to occasion; response is kept within bounds or involves whole organism.

Developmental progress in emotional control is shown in ability to delay or inhibit overt responses, in attachment of emotional responses to situations in which they are appropriate, and in limitation of the extent of the overt response. Such emotional control should keep pace in normal development with intellectual development and with widening of experience.

We assume here that all responses possess some emotional aspects. These aspects exert a certain amount of influence on the response as a whole. In panic fear, for instance, all voluntary muscular action may be inhibited by the predominance of emotional components in the reaction, as in a person "frozen" with terror. In general, unrestrained emotional reactions are characteristic of very young children. Any degree of selectivity and deliberate inhibition occurs but rarely in babies; so we label actions in which emotional components are unduly prominent as "childish." If these actions are wholly without restraint and markedly inappropriate, we call them "insane."

It is not to be assumed that the ideal life is one untroubled by emotional aspects of responses. For richness of living, for sane guidance of choices, and for ability to use all our powers on demand, we depend on our power to feel as men at their best have felt. Emotional unresponsiveness does not bring us satisfaction, being neither just nor courageous; in its most extreme form, it cuts us off from our fellows to such a degree as to be recognized as a form of insanity.

Under pressure of overstimulation a child who habitually makes an immediate overt response to stimulation tends to exhaust himself, thereby still

further lowering his threshold. The remedy is reduction of stimulation, temporarily at least. The delayed or inhibited response may, however, represent inward turmoil and disturbance, in itself confusing and tiring.

Appropriate or inappropriate reactions may indicate the width or narrowness of a child's range of experience; his favorable or unfavorable conditioning; his ability and disposition to appraise and modify at need his own behavior.

Emotional response may overwhelm the organism or may be kept within bounds: which of these two courses is to be taken may be determined by the strength of stimulation to which the organism is exposed, by the force of experiences recalled by association, by the ability of a child to recognize and control his emotions, or by the standards of desirable behavior which his social training has inculcated. The child whose responses are inappropriate or out of proportion to the situation which calls them forth and who is overwhelmed by emotion in regard to apparently insignificant things must ordinarily be considered seriously handicapped. His achievements will be, in all likelihood, inadequate measures of his abilities. Correction in extreme cases calls for professional assistance. A child's ability to carry responsibility, to meet critical situations, to solve problems is frequently so markedly impaired by his emotional imbalance that it becomes unwise, even dangerous to offer him the wider opportunities for which his gifts apparently fit him.

18. Attention span. Ability to concentrate attention, to resist distraction; self-direction; continuity of purpose and effort.

19. Problem solving. Child ignores problem; responds directly to problem; responds indirectly.

Specific method of attack on problem is by means of a primitive response, a random response, exploratory manipulation, planned manipulation, dependence on aid of others.

Child is interested and persistent in attack on problem or lacks interest; is overexcited or is inactive; is compliant or disgruntled; is confident or timid; is courageous or despairing.

Specific problems solved may relate to personal care, play, social relations or may be those formal problems which are set in test situations. All problem solving is related to knowledge getting which may be achieved by first-hand methods or by questioning or by reading.

There is more difference between individuals with regard to methods of attacking problems than there is change from age level to age level. There is change from year to year, however, in the kinds of problems which children may be expected to attack successfully. Problems set by school or in test situations show the kinds of problems we expect children of different ages to solve. Problems set in home and play situations vary decidedly and depend upon many factors not taken account of in school or test situations, as: economic condition, attitude of parents, physique and health status, attitude of child toward himself and of others toward him.

Problem-solving achievements depend somewhat on intellectual ability but also on disposition, attitude, training in dependence or the opposite. A child's reaction to a problem, recognized by him as a challenge, is highly significant for comprehension of his whole personality. If he is physically efficient and mentally able and yet shows himself inadequate in dealing with problems, he is giving us definite evidence of unsound training, discouraging experiences, too great dependence on others, too little ability to mobilize his own powers. Judge his adequacy rather by his courage, persistence, interest, resourcefulness, foresight than by his success or failure in the immediate situation. Self-criticism, prompt recognition of failure, and striking out on a new tack usually indicate good intellectual capacity.

Earliest problem solving is organismal rather than deliberate; problems are solved without being recognized consciously as such. Success in this kind of problem solution is important for a child's whole future attitude toward difficulties: this is the basis for justification of the emphasis placed on early mastery of skills involved in personal care such as feeding self, toilet needs, etc. As a child's play activities widen, he encounters and surmounts obstacles; finally, obstacles come to be an integral and important part of his play material. His relations with other persons present a different set of problems; he finds, slowly, that a different set of techniques is necessary to deal with them. Direct combat is frowned upon; he may resort to indirection, persuasion, or downright double-dealing. He often uses on others the tactics which have been used on him, thereby revealing some of the experiences which have formed him.

Human beings are characteristically eager to get knowledge and seek it directly through their own senses and powers of manipulation, through reflection on their experiences, and through calling on the knowledge of others by questioning or by reading. First-hand contact gives us a safe basis for later reflection. When children show little disposition to seek knowledge of accessible objects by handling, smelling, tasting, taking to pieces, we suspect a too well disciplined life, surrounded chiefly by things labeled "don't touch." Or such behavior might indicate physical disability, mental retardation, or emotional absorption. Lack of persistence in knowledge getting may point to past failures, narrow range of experience, lack of physical vigor, dullness. Poor concentration may indicate lack of congruity between the child and the task he has attempted—too easy or too difficult. When desire for knowledge is manifestly aroused, driving a child to seek its gratification in every way open to him, yielding satisfactions of a high order, this is significant in several respects. It is "high-grade play," for one thing, contributing to the enrichment of his life. It opens to him new interests and vocational possibilities; it is a good augury for success in higher education.

Lack of intellectual interests may arise from barren, monotonous surroundings, from lack of encouragement or poor access to means of satisfaction, from lifeless teaching, from oversocialization.

20. Orientation. Child has acquired more or less completely certain general ideas such as conceptions of time, space, quantity, number, of reality and pretense; of social relationships (including those between men and women) and regulations; of birth and death; of the universe; of religious faith.

The simplest and most immature human being seeks and achieves an orientation of himself to himself and to the world in which he lives, moves, and has his being.

The quality of a child's stock of general ideas has a significance which is difficult to estimate but is generally conceded to be of very great importance. It is certain that he will develop ideas of some sort on such subjects as birth, death, right, wrong, etc. if he is of normal mentality; if these ideas are childish, inadequate, superstitious, warped, the whole fabric of a child's conscious life is endangered. We have ample evidence that defective orientation

can be corrected by intelligent and patient effort on the part of his elders.

Inadequate recognition of a child's need for relating himself to the world of persons and of other natural objects through developing general ideas is a common factor in producing poor orientation. The basis for such ideas is acquired in very early life; conscious attention by teachers and parents to their formulation is necessary.

Orientation has to do with some very significant achievements of the developmental period. We do not expect the very young child to have any of these general ideas, and we do expect the adult to organize his life in their light. Within very wide limits, however, we do not know what progress we may expect to find at different ages. Acquisition of important conceptions has been left so generally to chance that we have little basis for guessing the degree of enlightenment which a well-educated, healthy, happy child might attain. We may be sure that it would be well beyond that now reached by many adults who have been misguided or not guided at all.

Defective orientation is significant for a child's personal integrity. Opportunities for rich experiences, wide range of accurate information, spiritual support in times of doubt, grief, and confusion are all ways of providing educational guidance and help in this task, which is, after all is said and done, peculiarly the individual task of every human being.

21. Intellectual abilities. Mental age; behavior in test situations, in everyday situations, in critical situations; school progress and achievements, measured by grade placement for age and by scores made on achievement tests.

Mental age by definition progresses for most persons at the same rate as chronological age. The child with mental age significantly above or below his chronological age needs special planning of his formal education and definite safeguarding of his social and emotional development. This problem is most acute for the child who differs markedly from the individuals in his immediate group, either in mental age or in I.Q.

We expect a child to enter school at about the age of six and to progress grade by grade, achieving at each grade level mastery of certain skills and ideas. School progress is, to a certain extent, indicative of intellectual ability, especially when considered in regard to a large group of children.

But in individual cases it cannot be taken for granted that school history measures fairly a child's capacity. When a child fails, his retardation may be due to inability to learn at the rate at which others learn; to failure to attend school as a result of illness, of travel, of lack of interest on the part of himself or his parents; or to poor use of his intellectual ability. In some cases, poor progress is the result of absorption in other interests, in home duties, in money earning.

A child who makes better than average progress through school shows at least the intellectual ability to make that progress. In addition, he is probably showing the effects of membership in a school and home that made such progress possible and perhaps the effects of help from interested and intelligent parents or other adults. A child who makes average progress through school has shown the ability requisite to make that degree of progress.

The significance of a child's school progress varies in different school systems. The policies of a school system with regard to acceleration and retardation, the opportunities offered by it for special coaching, the richness and variety of its educational program all help us to decide whether a child's failure to progress satisfactorily is due to a lack of ability on his part or to inadequacies of the school program offered him. Much the same can be said for rating on achievement tests as for the record of promotions. A child's achievements are the result of his intellectual ability, of his opportunity to learn, of a physical condition good enough to make learning possible, and of intelligent direction of his efforts. It cannot properly be judged in the light of any one of these elements.

22. Self-direction. Initiative and responsibility shown with respect to own actions; handling own money, budgeting; planning use of own time; voluntarily planning actions now in terms of a future goal. Control of emotion, knowledge getting, problem solving, and orientation all give some evidence of self-direction.

Under ordinary conditions of living a child becomes increasingly independent as he grows older and takes more and more responsibility for himself, his time, and his money. By the age of eighteen or a little later, the community expects him to be able to carry adult responsibilities. Whether he

can or not depends in large measure on the opportunities he has been given through the previous years.

Efficient self-direction depends in part on the ability to move about and do things for oneself, hence on neuromuscular development; in part on ability to understand general principles and their application to conduct in both new and customary situations, hence on intellectual development; in part on emotional control and in very large part on successful practice in making decisions for oneself in more and more important matters. There are probably also innate individual differences which account in some measure for one child's dependence and another's independence. Probably in most cases when a child shows inability or unwillingness to direct himself in a degree markedly below that of his fellows, the failing is due to lack of adjustment between his abilities and the opportunities offered him. Either he has never been allowed to do things for himself and has neither the skills nor the mind set necessary to independent action or he has been expected to make decisions in situations for which he was not ready and has learned, through repeated failures, to be unsure of his own abilities and judgment.

Both children and adults show inconsistency in the degree to which they carry responsibility for themselves. At times we all appreciate the feeling of security and relief which comes from depending on someone we consider wiser than ourselves; at others we glory in our own independence. This is particularly marked in adolescents who are past the period of childhood when it is taken for granted that adults will make all the important decisions, and have not yet reached the period of adulthood when they and the rest of the community take for granted their independence of thought and action.

23. Use of time. Time spent in maintenance of life and status through eating, sleeping, exercise, personal care, and other tasks; time spent in various kinds of play (see page 36); time spent in activities related to perpetuation of race, such as "playing house," sharing in the work and the play of the home, taking care of younger children, developing satisfactions independent of parental aid.

The use of a child's time, particularly of his "free" time, tells us much about a child's special interests, tastes, and abilities. His activities tend

to be those at which he is most successful and therefore show his particular abilities and interests. They show, of course, past opportunities for participation and development of present skills, and they foreshadow future attitudes and skills. His tastes and interests, his initiative and resourcefulness, as developed up to the present time, are revealed by a thoughtful inspection of his day's occupations.

Children have surprisingly little "free" time; this is partly due to the time that clumsy little people require for personal care, but it is also due to unreasonable demands made on their time by their elders. "Never interrupt a baby's staring," Miss Shinn's dictum, remains wise advice. The child whose days are fully regimented is given small opportunity to reveal the store of fairy-godmother gifts which he carries, often quite unknown even to himself.

In general, we fail far more frequently by narrowing experience, dulling interests, cramping harmless curiosity than by permitting overdevelopment of some aspects at the expense of a child's total welfare.

24. Social responses. Friendly, shy, antagonistic. On friendly terms with a few people only, with many; with members of immediate family only or with others outside family circle; with own sex or both sexes. Recognizes others but does not participate in their activities; enjoys working and playing with others on cooperative basis; takes responsibility for others. Is dependent on others or independent. Stimulated by his fellows or does not obviously respond. Cooperative or competitive.

Human relationships with one or a few intimates, with many friends and acquaintances bring rich satisfactions; they also provide opportunities for grief and pain. There are wide individual differences in the degree to which human beings respond to others and enjoy others. Some of these differences are probably innate; others depend upon the satisfactory or unsatisfactory nature of past experiences involving other people.

Babies probably do not recognize other human beings as different from objects. With communication and widened experience, some children come to feel and think very much as their fellows do, to share common experience in the fullest sense; others tend to remain aloof, never to achieve a basis of

understanding with their fellows. This "sharing" with others we term sociality.

Tests are notably lacking in this field. Observation provides the best basis for judgment. A few tests of sociality are available. The Vineland Scale of Social Maturity is based on discovery of developmental changes in becoming independent and in taking responsibility for others.

Almost all individuals respond to the presence of others, sometimes by distraction from the work at hand, sometimes by increased effort. When a group works together there is ordinarily sufficient group facilitation to result in the individuals' accomplishing more work than if they were alone, although sometimes the work is of poorer quality.

III. Health Status and History.

25. Bony structure.

Head. Well formed, jaw wide enough to prevent crowding of teeth; or head odd in shape, narrow jaw, crowded teeth.

Teeth. Well formed, completely and smoothly enameled; regular or irregular; pitted teeth, with poor bite.

Arms and legs. Straight; or bow legs, knock-knees.

Wrists, knees, ankles. Not enlarged; or joints ungainly and protruding.

Chest. Broad or narrow; expansion slight or considerable.

A child's health may have been profoundly influenced by failure in maternal nutrition before his birth and by defects in his own nutrition in early years. The items which tell us of early nutrition are those relating to the formation of bones and teeth. Poor skeletal structures generally show either a lack of calcium in the diet or a failure by the organism to utilize this mineral. Poor bone growth is shown in crooked, malformed bones and crowded teeth, with resulting malocclusion. These may make for inefficiency in the organism and may contribute to a sense of inferiority on the part of the child. Good bone growth produces a strong and efficient skeleton. Poor bone growth may indicate rickets in earlier years, being only one symptom of a long-continued period of defective metabolism, which has perhaps left its mark on other tissues.

26. Metabolic efficiency.

Hair. Plentiful or scant; lustrous or dull.

Eyes. Bright or dull, converging smoothly or squinting; conjunctiva clear or inflamed; mucous lining of lids pink or pallid.

Skin. Smooth or disfigured by eruptions; tanned or pale; moist and soft or dry and harsh; fat beneath skin plentiful and firm.

Mucous membranes. Pink or pallid.

Fingernails. Pink or pallid.

A child's health status is shown by those items which relate to the adequacy of digestion, assimilation, circulation, and excretion, and to a satisfactory balance of endocrine secretions.

In general, unsatisfactory conditions of hair, eyes, skin, mucous membranes, subcutaneous tissue are indications of poor metabolic functioning. Poor appetite, changes in pitch and timbre of voice, in gait and carriage, emotional instability, and an extraordinary amount of senseless activity also suggest poor nutritional status.

27. Musculature. Well developed, evenly developed, or poorly developed generally; or musculature of legs well developed while that of arms and trunk is undeveloped.

28. Respiratory tract.

Nose. Unobstructed or so clogged that nasal breathing is difficult or impossible.

29. Hands and feet.

Hands. Well cared for or neglected, nails smooth or bitten, joints smooth or enlarged.

Feet. Arches high, medium, low, flat; feet strong and flexible in walking; inner borders of foot straight from heel to tip of great toe, or great-toe joint bulging.

30. Vision. Defect suggested by failure on Snellen card; by carriage of head, posture in reading, failure in concentration on near work, reading difficulties; by appearance of eyestrain, headaches, irritability. Common defects due to defective coordination of ocular muscles (squint, walleye, or cross-eye); or due to defective shape of eyeball causing hyperopia (far sight) or myopia (near sight); or due to irregularity in curvature producing astigmatism (blurred vision).

Impaired vision, whether corrected by glasses or not corrected, is a condition of far-reaching significance for a child's whole personal development. Inability to see as well as others do may handicap him in school work, in cultural interests, in games and feats of skill, and in social adaptation. Retardation due in part at least to poor vision is

often interpreted as due to stupidity, with resultant injustice and loss of self-respect. Awkwardness, failure to do what others do because of missing more or less obvious visual cues, may cause social maladjustment. The strain associated with hypermetropia may be a contributing factor to irritability, fatigue, and even poor nutrition.

Correctable defects of vision should be referred to ophthalmologists, eyestrain reduced to a minimum, visual acuity considered in making vocational choices. Special attention should be paid to the general health of a child suffering from visual defect; special eye safeguards should be provided for all children during convalescence. Children with slight visual defects should remain in regular classes with particular attention given to seating, lighting, and amount of reading and writing demanded. Those with more severe defects should be placed in sight-saving classes in day schools where they may join other children in subjects in which near work is not involved. Children with very severe defects are considered educationally as blind. They must receive their formal education through the sense of touch, in special classes or in special schools.

31. Hearing. Defect shown by loss of nine or more sensation units on audiometer test in either ear or by performance on whisper, watch, or tuning-fork tests; defect suggested by failure to follow oral directions, posture of head, voice, failure in social adaptation.

Children handicapped by hearing difficulties are often mistaken for dull children. They suffer educational retardation and the resulting feelings of failure and inadequacy. Specialists recommend lip reading for those with more than nine sensation units of loss of hearing. Others, with loss of three to nine sensation units, need special consideration by teachers. Children with hearing defects should be given the best possible general health care. Communicable diseases of childhood menace their residual hearing.

These children tend to make many errors in social situations and so to become shy and self-conscious; these difficulties can be largely overcome by intelligent educational treatment.

32. Heart. Organic or functional cardiac defects; compensated or noncompensated.

33. Weight for height, type, and age.

34. Reports of disease and immunization.

Immunization. To smallpox, diphtheria; other diseases.

Childhood diseases. History of measles, mumps, chicken pox, whooping cough, diphtheria, scarlet fever; sequelae.

Respiratory infections. Frequent (more than three colds a year); severe (lasting more than three days); complicated by sore throat, middle-ear infection, bronchitis, pneumonia.

Tuberculosis. Contact with tubercular person; reaction to tuberculin test; appearance of chest as shown by X ray.

Digestive disturbances. Shown in feeding difficulties in infancy and preschool life; attacks of vomiting, diarrhea, indigestion.

Communicable diseases have been called the "blights of childhood." They too often leave their trail in defective sense organs, poor tooth and bone growth, and defective functioning of vital organs. For each child, we should know the past history of disease in order that we may better understand his present health condition.

This knowledge plus a record of artificial immunizations will enable us in time of epidemic to focus attention on susceptible children. The record of immunization also tells us something of the parent's attitude toward scientific medical care.

The child who has but recently recovered from an attack of a communicable disease often suffers, during a long period of time, a lowering of vitality which he should meet by a modification of his daily routine. However, there are psychological advantages in slipping back into the ordinary routine of life after illness. A child's convalescence should, for these reasons, be safeguarded by the specific advice of his physician.

Even under the best conditions which we at present know how to maintain, communicable diseases attack children and in spite of care leave in some cases aftereffects (sequelae) which are handicaps of long duration.

These sequelae and the other health handicaps of the type considered here present strictly medical problems in diagnosis and in planning treatment for the children suffering from them. They constitute serious health hazards which merit a physician's individual attention.

Children suffering from these need flexible programs, special teaching devices, supervision of recreation, and vocational guidance.

Parents and teachers should be guided by the physician's advice in planning the daily routine of play, work, diet, sleep, rest for an afflicted child. Conferences of parents, teachers, school physician, and nurse are ordinarily essential; it is usually desirable for the school physician, with the family's permission, to communicate directly with the child's private physician. No general rules can be laid down, *each case needing to be dealt with as a special problem.*

35. Reports of focal infections. Teeth, tonsils, ears, appendix, lymph nodes, joints.

36. Reports of allergies.

37. Reports of endocrine imbalance.

It is obvious that health status bears an important relationship to quantity and quality of achievement. Rogers says:*

It would be foolish to expect any automobile to do its best with a flat tire, or when supplied with little oil and inferior gasoline, and it is just as absurd for a teacher to expect his best school work from a child who has defective sense organs, who is badly fed, insufficiently rested, or who is depressed by other faulty conditions or by disease.

It must be remembered that no one item is of first-class importance in telling us about a child's well-being. Children in good condition may have dark circles under the eyes, pale skin, or poor posture. Attention must be paid to the whole picture. However, we may say with confidence that any child who departs widely in several respects from the conditions characteristic of most healthy children needs to be studied by a competent physician. A child in this condition is restless, readily fatigued, and likely to have a much shortened attention span; he does not retain what he learns so well as he would if in ordinary good health.

Lack of food or poorly chosen food, overstimulation, too little sleep and rest, insufficient free play, a nagging type of discipline, and other easily recognized errors in a child's everyday life are contributing factors which may be discovered and remedied by sensible adults without troubling a pediatrician for advice.

Focal infections, rapid growth, glandular deficiencies may account for poor condition in children whose general regimen is good; these require diagnosis and treatment by competent physicians.

* "What Every Teacher Should Know about the Physical Condition of Her Pupils."

B. As a Descendant of Family Stocks

I. Family Record.

38. Nationality.
39. Health.
40. Education.
41. Occupation.
42. Special interests.
43. Achievements of those members of the child's family for whom data can be obtained.

We know relatively little about the inheritance of specific human traits. Most of the investigations have been concerned with the inheritance of minor abnormalities or of such characteristics as color of hair and eyes, which have rather slight significance for welfare. However, we do know that children are more nearly like the other members of their families than they are like other persons in the community. Knowing something of the characteristics, abilities, and achievements of parents, grandparents, cousins, uncles and aunts, sisters and brothers gives some clues as to the potentialities inherent in the stock from which the individual has drawn as from an old-fashioned "grab bag." It is important to remember that inheritance is from the stock, not from one's immediate parents or from any one ancestor, immediate or remote. On the one hand, we must refrain from judging a child in terms of his delinquent father, taking no account of his intelligent mother, his

hard-working sister, and his famous great-uncle. On the other, we cannot consider an ancestor who "came over on the Mayflower" of too great importance, except as he reminds us that such traits as courage, good physique, independence, resourcefulness have blossomed once on this family tree and hence are not unknown to it. The significance of a knowledge of heredity in human beings for those interested in children lies in the varied possibilities of human inheritance, with consequent multiplicity of potentialities in any person, however small and immature. These remain potentialities until provided with the opportunity for development. An attempt to estimate the hereditary potentialities of a child may set us to looking for hints of desirable traits, for whose development stimuli should be provided. Other traits, not so desirable, will be given as little encouragement as possible.

The fact that children inherit from the stock rather than from their immediate parents means that an individual child may be very different from that family into which he is born and in which he has grown up. Because the environment sets strict limitations on the members of a family, such marked native differences may result in personal maladjustments, in feelings of inferiority, in rebellions against family discipline; or in docile acceptance of family standards and a failure to develop tastes, interests, and abilities which might be of value to the individual and a contribution to the community in which he lives.

C. As a Member of Groups

I. Family Group.

44. Members of household and their relationships.
45. Economic conditions in family.
46. Interests of parents.
47. Attitudes of parents toward home and children.
48. Attitudes of parents toward school.
49. Religious and social affiliations.
50. Influence of group on child.

The inheritance of native capacities and traits is from a family stock and cannot be judged with certainty from knowledge of the immediate family group, but the characteristics of the small family

group with which a child lives in the intimate contacts of daily life have great significance in determining his chances to realize his potentialities. The economic level of his family, their knowledge, interests, and traditions will determine the food he is given to eat; the adequacy of his clothing and shelter; his health habits; his manners and, to a large extent, his standards of conduct; his attitudes toward knowledge, politics, sex, religion, other people, himself; the magazines and books he reads; the trips he takes; the skills he develops, the acquaintances he makes. The size of the family, their attitudes toward him and toward each other, the agreement or lack of agreement between elders on matters of discipline and routine all have tre-

mendous influence in determining thought and behavior.

The place of a child, as eldest, youngest, or only child, has been thought to have great influence on his life. Careful studies fail to show any respect in which all first born, or latest born, or even "only" children are alike. This becomes particularly clear when account is taken of those differences in economic and social status which accompany differences in size of families. A child's position in his family is certainly an important fact in his biography; but its precise significance must be sought in each case. An only child is like all other "only" children in just that one respect, and in no other.

Similarly, it has been considered of great importance to know whether the family is complete or broken, whether the mother is employed outside her home, and whether economic adequacy and security are assured. Studies have shown that children in juvenile courts have come from broken homes in greater numbers than would be expected, judging from the percentage of children from such homes in the general population. But other studies show that many children from broken, inadequate, or insecure homes develop into reputable, law-abiding citizens. These facts have significance, surely, yet their meaning in any child's life cannot be taken for granted but must be painstakingly explored.

The White House Conference gives us a statement of what a good home contributes to a child's life, today and for all his future life.

1. Meets need of child for security: through parent's affection, understanding, and consideration; and through the accepted place of the family in the community, its unity, and its economic stability.

2. Meets need of child for accomplishment: through opportunities for work, with enough success to encourage endeavor; through opportunities for helpful service to others; through freedom from interference with natural desires for achievement.

3. Provides early health care: through diet, clothing, sleep, rest, play; through medical supervision; protection from fatigue, overstrain, infection.

4. Provides opportunities for mental development: through encouragement to do for himself, through answering questions, through giving him space and materials for play.

5. Provides early social training: through experience with other children under supervision; through vocational guidance, through training in manners and morals;

through help in learning to live in harmony with aims and objects of other people.

6. Assists child in orientation, in developing his views of life, his concept of God, and his scheme of the universe.

"The ideal family would provide for the child a friendly and hospitable environment for the development of his emotions and abilities, a secure relationship in a group of dignified social status wherein he was loved, protected and encouraged."*

II. School or Play Group.

51. Size and composition.

52. Management.

53. Achievements.

54. Influence of group on child.

School and play groups vary in size, in composition, in purpose, and in permanence. A child cannot be considered apart from the group of which he is a member. His position in the group determines in large part his behavior and attitudes and the reaction of other children to him. The heaviest boy in a group may be a leader because of his physical prowess and may develop a domineering and arrogant disposition, or he may suffer under the burden of some opprobrious nickname referring to his size and be considered an outcast both by himself and by his fellows. The brightest child in a group, if the difference in mental age between him and the mode of the group is great, is usually not so much at ease as a child just above the average for the group. The dullest child in the group is at a disadvantage. Differences in nationality, age, physique, economic status all have their influence, which we must be ready to take into account in trying to understand a child.

At the younger age levels sex distribution in a group has little apparent and immediate effect. A boy in a group of girls will behave very much as he does in a group of boys or in a group equally divided between the two sexes. At older ages this is far from being the case. The three situations described above will affect different individuals in different ways, but we can be certain that each will have some effect not only on the boy but on every individual in the group.

In adult-controlled groups, the method of control and the attitude of adults toward the children in their charge influence the members of the group. Domination by adults and strict adherence to routine may rouse some to rebellion, may effec-

*Adapted from *White House Conference Leaflets*.

tively stifle all efforts toward initiative and independence in others, may encourage tale bearing and deceit.

Some groups are rude and boisterous, given to conflicts and disturbance; others are quiet and well mannered. These general group traits influence the individual members. The activities in which the group participates have significance for

each child, whether these adventures be window breaking and stealing or building a play house and learning to play baseball. The balance between competition and cooperation within a group and between groups is a significant factor in setting standards, particularly if the group is one which profoundly engages the loyalty of the children who make it up.

D. As Related to His Physical Environment

I. General Environmental Conditions.

55. Air. Abundance of fresh moving air; for work, a temperature of 65 to 68°F. with a moderate humidity.

56. Light. Should be sufficient for the type of work being done, without glare, unobstructed by shadows. Window area of schoolrooms: one-fourth to one-fifth of the floor area; no cross lights; translucent shades, adjustable and adjusted to meet changing light conditions. Children, teacher should not face the light during any considerable period of time. Walls, blackboards, desks: dull finish to avoid glare.

57. Space. Large enough to allow free movement on the part of the children. The younger the pupils, the more room. Opportunity for children to escape group pressure on occasion. Classroom should have access to out-of-doors. Outdoor space adequate in size, free of obstructions, provided with equipment suited to the ages of the children using it. Safety hazards minimized.

58. Sounds. Classroom reasonably free from noise from street cars, traffic, playground, shops, etc.; gongs and bells not harsh or unnecessarily loud; floors and walls of material which gives maximum quiet in room.

These environmental conditions have much to do with the health, comfort, efficiency, and social conduct of children. Individual responses to changes in temperature, etc. vary greatly and must be studied for each child. Some endure heat or cold much better than others, for instance; but extremes in air conditions will affect all in much the same general fashion.

Children vary greatly in their tolerance of direct sunlight and in the discomfort endured by them when facing glare. But any child will be made ill by a certain degree of overexposure to

sun and "headachy" by the effect of strong light on his eyes. Children suffer for lack of sunshine, some much more readily than others.

The significance of crowding is manifold: overstimulation is more difficult to avoid; communicable-disease dissemination is made more probable; opportunity for children to gain full command of their bodies in various kinds of movement, stunts, games, is greatly limited; the child's pleasure in companionship is liable to deterioration into a sharply competitive struggle for space and safety for his own play ventures. Children find it impossible under crowded conditions to escape group contacts, even momentarily. Their companions become obstacles to activity rather than "playmates."

Recent physiological research has shown that noises interfere with learning and impair efficiency. There is evidence to show that continuous exposure to noises to which an individual has become accustomed may still be definitely unfavorable to his general well-being. The location and structure of schoolrooms in the past have been determined with little or no regard for this environmental factor.

Much can be done to improve existing conditions; in the future we hope for more extended use of sound-absorbent construction materials and greater efforts to reduce the noise level in schools to the intensity (40 to 50 db) which permits maximum working efficiency.

59. Equipment. Tables and chairs movable. Furnishings attractive. Cleanliness and orderliness, convenience and ease of access to materials. Variety of materials; store of books, tools, and materials. Safety hazards at a minimum.

In his nonliving environment, a child enjoys the pleasures of novelty and finds satisfactions in playthings. Polished floors, fine furniture seem to be of negative value. Furniture and fixtures suitable

to the child's own size are important aids to independence, initiative, self-direction in preschool years. Later, many children derive great satisfaction from gratification of their own tastes in possessions. Children's pictures, books, toys, furniture are too often purchased by and for the satisfaction of the grownup. The chief significance of a child's material environment for the student of that child's development is found in its mute testimony to the thoughtful respect or careless ignoring of his personal tastes and interests by parents and teachers. Schools, especially secondary schools, are the worst offenders in this regard.

There is no evidence that great expenditures of money are necessary in order to provide children with favorable environment. Sun and shade, air, light, space are the basic necessities. Earth, water, plants and animals, and a "junk heap" of odds and ends make rich opportunity for little folks; music, games, books, pictures, playthings

are desirable additions as they grow older; for the adolescent, no equipment is so important as the privilege of going abroad to seek his own. A room or part of a room which is his own is highly valued. Equipment for pursuit of hobbies, good provision for study, social games, and music are important to him.

60. Building and neighborhood. Quiet or noisy. Air clean and fresh or carrying dust, gases, or odors. Light obstructed by buildings, trees, hills. Neighborhood containing some open spaces or crowded with buildings. Free of traffic hazards. Fire hazards at a minimum. Near playgrounds, libraries, museums, and other constructive community agencies or near stores which dispense liquor, unsupervised commercial recreation centers, and other destructive factors. Adequate fire, police, and health protection.

E. Estimation of Success in Adaptive Behavior

Actions are judged to be adaptive or maladaptive, successful or not on the basis of their observable effects. When conduct assures the organism and the species greater security and enrichment of life, that conduct is adaptive or successful in the broadest sense of the term.

To live, to earn a living, to enjoy living, to be accepted socially, and to accept oneself and the universe—these five elements in adaptive behavior seem to be basic. It is interesting to notice that each group of these adaptations begins its making in early childhood and is recognized at each succeeding stage. Perfection of adaptation is not a matter of age level, as is attainment of maturity. A baby may be very successful as a baby. Neither is adaptation dependent on intellectual acuity, a sound body, or personal charm. A dull person may be a success in his own fashion; it is perhaps a little more dangerous to say that an extraordinarily bright person may confidently expect also to be a successful human being.

"To err is human," and maladaptivity is observable in the whole living world, far beyond the bounds of humanity. The means of correction which are at the command of men are far more precise and effective than those possessed by other creatures. A good life may be made under an astonishingly wide range of circumstances and in

spite of heavy handicaps; a primary essential is stocktaking, appraisalment, and courageous change.

61. Personal care and health maintenance.

Personal care. Control of eating, sleeping, elimination; keeping reasonably clean and well groomed; caring for one's own clothing.

Failure seen in "feeding problems," insomnia, etc., in the shabby unkemptness characteristic of the "down-and-out," and of certain groups of the insane; seen also in the dependence of the sick, the idiot, and the senile.

Health maintenance. Choice of food and activities to keep in as good health as circumstances permit; application of scientific knowledge to protect one's self against communicable disease; taking advantage of the help of a physician by means of serial health examinations.

Failure seen in the half sick and in the victims of erroneous ideas as to diet and medical treatment.

62. Satisfaction in work, vocational plans and activities.

Vocational plans and activities. Watching the work of his elders, helping at it; learning to take care of possessions; planning for vocation, preparing for it; learning to handle money.

Failure seen in child who is uninterested in surroundings, absorbed in phantasies; in youngster who has no share in labor of his elders; in boy who drifts, planless; in youth who stumbles into any job open to the untrained; in the adult unemployable; in the pauper.

Satisfaction in work and play. Has found work within capacity, interests associated with it; recognizes work as significant and valuable source of satisfactions; opportunity to cultivate kinds of play which fit interests and abilities, come within price range, have element of active participation, and further social development; recognizes play as a legitimate way to employ energies and money and time, as an important source of satisfactions.

63. Social conformity in essentials, participation in family life.

Social conformity in essentials. Fits into economic pattern; observes property regulations; submits to constituted authority on critical matters.

Failure seen in the unemployables, in the delinquent, in the criminal.

This standard assumes a society so organized as to make it possible for all its members who are sound in mind and body and well disposed to find a place in the economic order. There have been and will be times and places where non-conformity is adaptive.

Participation in family life. Contributing one's share toward the labor involved in family life, whatever one's age or place in the household; helping make family life worth the cost and trouble to the particular family one belongs to.

Contribution to care of dependents. Understanding the obligation of and the essential elements in care of dependents and lending intelligent and generous aid in care of children, the aged, the handicapped of the community.

Contribution to subsistence and enrichment of life. Understanding our mutual dependence and conducting our private affairs in the light of the necessities of other men. From earliest childhood, perhaps chiefly in earliest childhood, we give our fellows pleasure by our sheer existence; beyond this first and greatest contribution to enrichment come all the services of education, of enlightenment, of more varied and delightful play, of more satisfying and productive work, which we may render.

Preparation for mating, child rearing. Developing from "the vague and unlocalized longings of childhood for human contact" an "emotional discrimination between the sexes"; understanding the process of mammalian reproduction, with its concomitants of differentiation between the sexes, mating, and provision for young; appreciating consciously the security and enrichment which family life has contributed to one's self as a person, and recognizing in general the cost of family life to one's parents as well as its value to them; learning that marriage and family life today cost both men and women heavily and are worth more than they cost, when wisely undertaken; growing up in friendly companionship with both sexes; separating one's self from one's childhood family group as far as is necessary to the establishment of a new home.

64. Sound attitudes toward things in general and toward self; satisfaction in relationships with nature, in human relationships.

Development of a sound view of life and religious responses which express it.

Attitude toward things in general and toward self, expressed by various authorities in terms of:

Self-organization,

Attainment of emotional balance,

Integration of personality.

Harmonizing religious, philosophical, sexual, vocational aspects of individual life to produce emotional balance.

This soundness of attitude is indicated in children by body management, facial expression, bearing toward others; and especially by a child's manner of reacting to a new situation or to a challenging difficulty: confidently, cautiously, intelligently, with courage; or timidly, fearfully, blindly; or by ignoring the challenge and retreating from the difficulty.

Failure seen in all degrees from aimless discontent and restlessness to insanity and self-destruction.

Satisfaction in contacts with nature. Taking pleasure in the visible forms of the living world, enjoying confidence in the orderliness and beneficence of nature, feeling a sense of the dependence of men on the natural order, and recognizing their place in this order.

Satisfaction in human contacts. From earliest family relationships, through the widening

circle of school days to the establishment of a new home and business connections, the individual is acquiring a taste for other persons as sources of various satisfactions to himself; or a distaste for them, as sources of conflict and personal limitation or frustration. To derive pleasure from proximity of others; to watch human antics with interest and sympathy and to make an effort to take part in the game his fellows happen to be playing; through this watching and participation, to realize the existence of others; to learn to take turns, to share, to follow the rules of the game with pleasure in being a part of a group engaged in group affairs; to do all this without losing his personal integrity

in undue dependence on others; these are recognized steps on the road to wholesome social development for the individual.

65. Personal tastes and interests. Has had a chance to find his tastes and follow them, when harmless, in food, clothing, playthings, his own room, his playmates, his reading, his games, his work; at different stages of his life has had a chance to find interesting things to do and the wherewithal provided for doing them to his own satisfaction. Pets, collections, gardens, drawings and painting, exploring, music, play-acting, cooking and sewing and arranging the furniture are some special interests in which children have found joy.

CHAPTER III

CHARACTERISTICS OF AGE LEVELS

Children come to maturity over a period of about 20 years, and any child at any one time is approximating complete development more or less closely, maturing going on at different rates for the various organs and functions. Thus, in any one child, skeletal maturity may be retarded and neuromuscular maturity accelerated; the eye may be slow in attaining adult size, shape, and efficiency, whereas speech may have reached full maturity. Within wide limits there is no "best" rate or pattern of maturing.

The information relating to one child is impossible to interpret except in terms of what is generally found in observation of other children of his age group. A great deal of time and effort has been expended in obtaining descriptions of traits characteristic of various age levels. These descriptions are scrappy, incomplete and sometimes contradictory but constitute our only basis for deciding wherein a child is like and wherein he is unlike other children. By this material we have some means of judging his degree of developmental maturity. On the basis of these estimates of individual traits and level of development, we can appraise his adaptive success more justly.

The danger of confusing normal with "optimum" or "admirable" is inherent in the use of age-level summaries. These have been referred to as "norms," and we have overlooked the fact that "norm" here is a statistical not a moral term. It refers to the middle 50 per cent of cases studied or to the top three-fourths or to some other frequency

of occurrence. No "norm" represents universal occurrence of the trait ascribed to the age. It has been assumed that if most children showed a certain trait at a given age, there was something wrong with a child who had not yet developed it and something very superior about the child who showed the trait at an earlier age. A vast amount of experimental and observational work has established the fact that although there are predictable sequences in development, there is no one time table for predicting the age when any "normal" child will have reached a specific degree of maturity in any specific trait or group of traits. "Normal" with regard to child study does not mean "optimum." Nor does precocity in a group of traits invariably mean general superiority nor lagging in certain respects mean general inferiority. Sound and wholesome development may proceed on its own schedule.

The following pages summarize briefly the characteristics of most children of 2, of 5, 8 to 12, 13 to 18. They give a rough scale by which the characteristics of children of other ages can be inferred. Most three-year-olds, for example, will be more mature than two-year-olds but will be more like two-year-olds than five-year-olds. An individual "normal" three-year-old may, however, exhibit some characteristics generally found at 2, some generally found at 3 and 4, some considered typical of five-year-olds, and even some of an 18-months-old baby.

ESTIMATION OF DEVELOPMENTAL PROGRESS

What is usually found at these age levels

Two-year-old

Five-year-old

12. Growth in Size

Refer to pages 41-45 for weight and height of children at various ages and of different types and for increases in weight and height from year to year.

Refer to pages 41-45 for weight and height of children at various ages and of different types and for increases in weight and height from year to year.

13. Body Proportions

Circumferences of head, chest, abdomen about equal; range from 18 to 20 in. Sitting height is relatively great when compared with the standing height in all children, but the younger the child the greater the discrepancy.

Head is large in proportion to body; about one-fifth total body length as compared to one-fourth at birth and one-seventh at maturity.

Legs are short in proportion to total body length; arms somewhat less so.

Slightly knock-kneed or bow-legged condition occurs in many two-year-olds. Foot still has fat pad on inner surface of sole, partially obliterating longitudinal arch of foot.

Chest larger in circumference than head or abdomen; head increasing slowly in size.

Legs lengthening.

Fat pad on foot gone; foot imprint resembles that of adult.

14. Organ Maturity

Teeth: 20 temporary teeth at 2 or 2½ years.

Shape of face modified by development of jaws and nose.

Eyes growing at about same rate as brain; advanced in size compared to most other organs; eyeball typically shorter from front to back than in adult.

Brain growing rapidly has attained three-fifths of adult weight. Myelination markedly incomplete.

Thymus attains maximum rate of growth.

Heart increasing in size proportionately to increase in size of body. Pulse rate variable, about 100 to 120 per min.

Lungs are relatively small; air cells have not attained full capacity.

Respiration 30 or less per minute; rate decreasing.

Six-year molars at about 6. Some decay, some stain in teeth of most children.

Shape of face modified by development of permanent teeth in jaws.

Eyeball still short (not adult length until child is 8 or 10 years of age).

Myelination more complete. Brain growing but not at such rapid rate; has attained almost eight-ninths of adult weight.

Heart still growing rapidly. Pulse rate decreasing, about 90 to 100 per min. Still more variable than in adults.

Lungs proportionally small. Respiration 22 or 23 per minute.

ESTIMATION OF DEVELOPMENTAL PROGRESS

What is usually found at these age levels

Ages 8 to 12

Ages 13 to 18

12. Growth in Size

Refer to pages 41-45 for weight and height at various ages and for increments in weight and height from year to year.

Refer to pages 41-45 for weight and height at various ages and for increments in weight and height from year to year. Girls outstrip boys in stature usually from the 11th to the 14th year; in weight usually from the 13th to 16th year. Both reach a plateau after which gains are small and slow. The plateau in weight is reached by girls at about the age of 16, by boys sometime past the age of 18.

13. Body Proportions

Head smaller fraction of total height.
Trunk smaller fraction of total height.
General tendency toward average or asthenic build.

Nearly adult proportions are reached during these years. "At the height of adolescent growth there is . . . a tendency to become heavy, due to accumulation of fat" (Stuart). In girls the trunk is elongated in the lumbar region, and the pelvis is enlarged. Body configuration of girl changes because of subcutaneous deposition of fat and development of breasts and hips.

14. Organ Maturity

28 permanent teeth erupt between 6 and 12 years. Digestive, respiratory, excretory systems mature in function.

Respiration rate decreases. Pulse rate about 70 to 90 per minute. Blood pressure increases; heart increases in size more slowly than body as a whole; amount of work per unit heart weight increasing. Muscles increase in size and strength.

Central nervous system attains nearly adult size. Eyes mature in structure and function at about 10 years.

Skeleton: carpals calcified by 12 years. In long bones epiphysial union still incomplete.

Reproductive organs in early stages of maturity, 9 to 12 years.

Last permanent teeth (wisdom teeth) erupt between 17 and 25 years. Concurrently the face assumes adult form and contour.

Heart shows fresh increase in growth, may double in volume between 13 and 15 years. For a time previous, the heart may be relatively smaller than at any other age. Unit weight of heart muscle may be doing more work than at any other age.

Often temporary variations from general rule that blood pressure increases and pulse rate decreases with age. By end of period adult pulse rate established in most individuals: about 70 to 75 in men, a little faster in women.

Respiration rate 14 to 18 per minute, adult rate.

Thyroid: often temporary hyperthyroidism in girls at any age between 13 and 17 years with accompanying rapid pulse and perhaps ease of fatigue, tremor of extended fingers, and emotional strain.

Relative increase in bulk of muscles, particularly of boys.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Two-year-old

Five-year-old

Organ Maturity

Control of rectal sphincter usually possible by 18 months; control of bladder sphincter by 2 years; child is dependable during daytime before he is at night. Wide individual variations; success greatly modified by training methods used.

Musculature complete at birth; increases rapidly in size and strength.

Bones, especially of extremities, growing rapidly in area; calcification occurring.

Ovaries and testes completely formed; ordinarily have taken adult position in body (descent of testes).

15. Body Management

Spine shows less convexity than in infant; lumbar curve begins to appear at 2 years.

Child stands alone at about 12 months, walks alone by 18 months, runs by 2 years.

Goes up stairs one step at a time (both feet on each step); holds firmly to railing.

Can operate a kiddy car around a chair.

Climbs, swings, jumps up and down.

Falls rarely. Individual variation in amount of activity. Muscular coordination improving very rapidly.

Use of preferred hand only partially established.

Drawing; can scribble, can make vertical stroke imitatively.

Self-care: can manage cup by handle, can use spoon; can put on shoes and some other articles of clothing.

Block building: builds simple tower but cannot manage graded blocks. Can put blocks into basket but cannot pile.

Play: can play catch and toss with ball. Chiefly sensory and motor experimentation; little manipulative skill.

Adult curves developed in spine.

Can walk on straight line. Capable of keeping time to music or counting.

Goes up stairs in adult fashion.

Hops and skips.

Can ride a velocipede.

Use of preferred hand established.

Can use knife and fork; can put clothes on; perhaps tie bow knot.

Can build complicated towers; can pile blocks.

Can bounce ball.

Interested in modeling, pasting, drawing, construction.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Ages 8 to 12

Ages 13 to 18

Organ Maturity

Reproductive organs mature in boys in general between 13 years 9 months and 14 years 3 months; in girls, between 12 years 9 months and 13 years 6 months.

Reproductive glands produce hormones closely related to development of secondary sexual characteristics. (Changes in voice through changes in vocal cords and muscles, changes in distribution of fat, changes in distribution of hair, etc.)

Epiphysial union in long bones complete between 17 and 19 years. Bones of fingers completely formed by 15, bones of palm completely formed by 16, bones of lower arm completely formed by 18 years. Bones of elbow completely formed at 16 years. Epiphysial union of bones of foot starts at about 14. Sutures of skull not closed until after 20 years.

15. Body Management

Posture that of adult period.

Improved ability to handle body in complex actions: running, jumping, stunts, rhythmic activities, balancing (after 10 years, beginning of awkwardness in rapidly growing children).

Increase in powers of coordination of hand and eye, in manipulative skill; attain nearly adult level by end of period.

Posture and gait, especially of girls, are influenced by change in shape of pelvis and increase in size of breasts.

Decrease in speed and accuracy of movement during early part of period (adolescent awkwardness), with marked gain in both during latter part of period.

Increase in strength paralleling muscle development. Motor adaptability, power to make a new coordinated movement accurately increase during latter part of period. Great variation among individuals.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Two-year-old

Five-year-old

16. Language

Has a "small but useful vocabulary."

Employs chiefly nouns and verbs.

Confuses pronouns: "her go," "me want she."

Characteristic articulation of two-year-old is called baby talk.

Gesture language understood long before words; used first to express needs and desired. May hinder development of vocal language habits.

Vocabulary: 1 year, 3 words; 18 months, 22 words; 2 years, 270 words; 2 years and six months, 450 words.

Interjections form a large part of speech.

Single-word sentences common.

Mean number of words in responses at 18 months, 1.2; at 24 months, 1.5 to 1.8; at 30 months, 3.1.

Marked interest in words as names or labels; in vocalizations and in words as play activities.

Inflection of nouns and verbs nearly perfect.

Articulation improved.

Vocabulary about 2,000 words. Nouns decrease in number relatively; verbs increase.

Responses average 4.6 words.

Interest in new words, long words, foreign words, rhymes, and nonsense syllables.

17. Emotional Control

Emotions have little variety and are brief in duration; are overpoweringly intense but short-lived; tears begin to be shed from grief as well as from anger or annoyance.

Child is affectionate, ready to attach himself to anyone who smiles at him.

Has begun to direct part of his affection toward other children. Is still dependent socially and emotionally on immediate family.

Easily aroused by frustration of movements or plans; anger is very brief; most frequently expressed in temper tantrums, in which child screams, kicks, and throws anything within reach.

Fear appears frequently: fear of dogs, of strangers, etc.

Responses are immediate, not delayed; tend to involve whole organism; are obvious and readily recognized in expression.

More varied emotions, including pity, emulation, jealousy. Longer in duration; remembers occasion for emotion longer.

More control. "Be a man" and "be brave" have some meaning to him.

Less ready to attach himself to people indiscriminately. Swayed by affection.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Ages 8 to 12

Ages 13 to 18

16. Language

Mechanism of articulation mature at about 8 years. Vocabulary: number and kinds of words increase, depending on environmental opportunities and individual abilities.

Written speech being mastered. Less play and egocentric speech, greater amount of collective monologue, conversation, and "adapted" speech. Use of words as symbols of abstract ideas; formulation by means of them of more and more complex generalizations.

Largely dependent on intelligence, range of experience, and environmental surroundings.

17. Emotional Control

Richness of emotional life increased.

Ceases to display tantrums; shows fewer fears, less timidity, shyness.

Cries because of pain, sorrow; not because of anger, annoyance.

Learning to cover up emotional responses; delays response.

Capable of gradation of responses; *e. g.*, yells only moderately when pinched.

Emotional life is rich and varied. Child rarely succeeds in organizing it satisfactorily until end of period. Gain in appropriateness of emotional responses.

Emotional responses are called out by ideas as well as by concrete experiences.

Great variation among individuals due partially to early experiences.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Two-year-old

Five-year-old

18. Attention Span

Young children often give sustained attention to concrete materials for long periods of time. Lucas reports a two-year-old who took off and replaced the lid of a can 79 times in succession. They seem, however, to be incapable of attending to abstract ideas in any appreciable sequence or for any long period of time. Are easily distracted.

Less easily distracted. Capable of more direction of voluntary attention. However, it is not easy for the child to give voluntary attention, even for a short time. As at any age, the power of the distractions present is very important.

19. Problem Solving

Methods of attack on problems are usually random response or exploratory manipulation. Little or no planned manipulation.

Children vary as to amount of dependence on others for help in problem solving.

Imitation a considerable factor.

Child has not yet begun to express his reasoning in language.

Unless progress toward solution becomes evident fairly soon, is likely to lose sight of goal or to become distracted by some trivial aspect of the problem.

Still largely motor; can plan manipulation.

Reasoning likely to be faulty; depends on intelligence and experience. May show great persistence. Wide individual differences.

20. Orientation

Possesses very few general ideas. Imagination and memory confused. Imagination reproductive, not creative. Does not distinguish real and unreal, fact and fancy. Leads to fanciful stories told as facts. Misstatement of dimly perceived facts very common.

Uses time words which refer to the present. Things out of sight are forgotten.

Space: poor discrimination in regard to size and distance.

Distinguishes "in" and "under" for the first time at about this age.

Property: recognizes own clothes, toys, etc.

Causality: very little grasp of cause and effect.

Judgment poor. Little foresight or imagination of consequences of acts.

May show an astonishing amount of information. May still be confused between imaginings and recollections.

Interested in birth, death, God.

Time: recalls events in the past and anticipates future events. Next month and next year not differentiated.

Space: reasonable mastery of distances and spatial relations within his own experience.

Property: recognizes property as belonging to others as well as to himself.

Some idea developed of obligation and satisfaction in doing things for others and in caring for younger children; family pattern being established.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Ages 8 to 12

Ages 13 to 18

18. Attention Span

Attends to play material over longer span.
 Can attend to abstract ideas for brief periods.
 Resists distraction.
 Can attend voluntarily even though not interested; span is shorter than for attention to play materials.

Individual variation wide.
 Child has probably attained the command of his attention which he will have as an adult.

19. Problem Solving

Trial and error less important; uses more deliberately planned attack in which past experience is used as basis for forecasting probable future results of actions.

More use of planned manipulation.
 Individual variation in amount of random response, imitation, and dependence on others, due in part to experience.
 Reasoning more frequently expressed in words.
 Persistency may be shown over long periods of time even though progress toward goal is not clearly evident, *e.g.*, planning for a vocation.

20. Orientation

Distinction between real and unreal (fact and fancy) fairly well established by 10 to 12 years.
 Kinships understood.
 Comprehension of social requirements, as manners, modesty, property rights, punctuality, doing one's share, group-membership requirements.
 Own family, home, circle of friends of family still the focus of activities.
 Widening contacts with children and adults outside the home.
 Recognition of differences between sexes; some comprehension of family relationships, of birth, marriage, death.

Attains some degree of historical perspective and of his place in the universe.
 Wide circle of friends and interests outside home.
 Establishes friendships with persons of own age, of same sex, and of opposite sex. By end of period the individual has some idea of what he wants and of his own powers.
 He has gained orderly familiarity with his own environment. He strives to emerge from the state of a dependent organism to that of an independent, self-supporting individual, ready to make contributions to the economic order.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Two-year-old

Five-year-old

***21. Intellectual Abilities**

Shown in everyday activities and in test situations. Tests composed of tasks involving motor skills, verbal comprehension, language use, form discrimination, number and size, drawing, spatial relations, memory, range of information, and familiarity with common knowledge.

Shown in everyday activities and in test situations. Same types as tests used for younger ages. Aesthetic appreciation developing. Better command of language makes group tests possible, although they are not so valuable as individual tests.

22. Self-direction

Has little power of self-direction. Can choose own play activities. In routines, can follow a simple time sequence.

If practice has been allowed, can be almost independent of adults in matters of personal hygiene, except for supervision. Can choose own play activities and carry out more complicated routines than two-year-old.

* For discussion of tests see pp. 46-51.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Ages 8 to 12

Ages 13 to 18

Orientation

Extension of acquaintance with the world about him, beginning of interest in and comprehension of other lands and peoples and of other times. (Note the great popularity of Lucy Perkins' *Twin Series*.) Beginnings of imagining self in some specific vocation; as a member of new family unit; as a successful person.

Fears often childish, not appropriate.

Dislikes and likes reveal limitations of orientation. Comprehension of right and wrong; some 10-year-olds are eager to reform social injustice, to convert heathen, etc.

Community shows ages at which it expects children to be able to take responsibility for themselves by regulations and laws concerning: age of consent; age of marriage; age for acquiring a driver's license, with and without parents' consent; working hours and conditions; selling liquor and cigarettes to minors; holding property; provision of special courts; inheritance; choice of place of residence; compulsory school attendance; voting; etc.

*21. Intellectual Abilities

Verbal discrimination improves.

Increased use of abstract terms; comprehension of abstract qualities improves.

In early part of period child recognizes differences; later, similarities. Solves puzzles, guesses riddles, enjoys puns.

Sensory discrimination, immediate memory, retention span reach maximum between 10 and 12 years. Play changes to more elaborate pattern; from singing games, tag and hide-away, to baseball, tennis, volley ball.

Play groups elaborately organized, with rituals, pass words, etc.

Reaches adult level of intellectual abilities.

Wide variation between individuals.

Some engage in games of high organization such as football, bridge, chess. Hobbies may involve much technical knowledge and skill, as in making airplane models, radio construction, elaborate handicrafts, making and caring for collections, reading.

22. Self-direction

Can learn to go to bed by the clock, to eat properly and regularly, and carry on other such activities in situations familiar to him; needs supervision in new situations. Can apply health rules, moral precepts, other simple rules to his own conduct.

Chooses own clothes, budgets small sums of money, takes short trips away from home alone. Can take responsibility for his own activities for a short time but needs adult help in making plans extending over days and weeks.

By the end of this period most individuals look forward to the future and direct their activities in terms of a distant goal, though they may change this goal from time to time. Capable of understanding general principles, moral, aesthetic, hygienic, economic, and applying them in specific situations, though they often need adult guidance in recognizing new situations in which the generalizations are applicable.

Specifically, they can choose their own clothes on the basis of appropriateness, cost, attractiveness; determine their own needed hours of sleep and plan their work and recreation with these in mind; choose food intelligently; establish their own moral

* For discussion of tests see pp. 46-51.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Two-year-old

Five-year-old

23. Use of Time

Sleep: at least 12 hr., including nap.

Individual variation in amount needed.

Remaining 12 hr. spent mostly in eating, personal care, and free play.

Much interest in sensory, locomotor, and manipulative play. Solitary play in the company of others characteristic.

With regard to personal care child learns to attend to own toilet needs; to dress self; to hang up and put away clothes; to brush teeth; to wash hands before meals and after toilet; to bathe self; to blow nose; to brush hair; to feed self; to eat a variety of foods; to put away toys; correct terms for bodily functions.

May perform simple tasks such as emptying waste-paper baskets, bringing in morning paper, passing food at table.

Sleep: 11 hr., no nap in most cases, some rest during day.

As much time devoted to personal care as at 2 years' level because child takes more responsibility and consumes more time than when cared for by adults. Enjoys "stunts" involving whole body.

Dramatic play added to locomotor and sensory. Dramatizes own experiences.

Play often takes family pattern.

Some group games of simple organization.

No competition. Some group dramatic play.

Enjoys nonsense rhymes, riddles. Likes stories, makes up stories.

Interested in modeling, pasting, drawing, construction.

Uses same materials as two-year-old, but play has more dramatic quality, e.g., a kiddy car is an "automobile," blocks make "houses."

Interests extend over known universe.

Explores and asks questions.

Improves performance of tasks of two-year-old, learns to keep things out of mouth; learns to cross street safely and avoid household dangers, such as injuries from matches, gas, electrical equipment, fire, cooking utensils; learns to go down stairs.

Greater participation in work of family.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Ages 8 to 12

Ages 13 to 18

Self-direction

codes and their own relation to the established order: budget their own expenditures for food, clothing, travel, recreation, though not always for emergencies: travel long distances alone; plan their activities, free from external coercion, in terms of expediency, their own interests, and the rights and privileges of others: establish their own circle of friends; use family property carefully. Many adolescents seem extremely inconsistent with respect to carrying responsibility for themselves, at one time resenting any directions or advice from adults, at another, appearing glad to be relieved of the responsibility of making their own decisions. Developmentally, individuals vary widely at any one age in ability to direct their activities independently. However, many possess greater abilities in these respects than they are allowed or encouraged to use. The resulting failure is adaptive rather than developmental.

23. Use of Time

Ages 9 to 11:

Refer to pages 52-54.

Sleep.....	10½ hr.
School.....	5 hr.
Eating.....	1 hr.
Personal care.....	1 hr.: bathing, teeth, hair, dressing
Study, music, etc.....	1 hr.
Chores.....	1 hr.
Play.....	3½ hr.

Play includes movies, group play, clubs, competitive sports, reading, listening to radio.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Two-year-old

Five-year-old

24. Social Responses

Recognizes others. Discriminates between strangers and those he knows. Described as playing alone in the company of others.

Knows the difference between boys and girls but does not differentiate between them in play. Depends on adults for care and protection; can do some things for himself. Laughs in response to laughter of others.

Engages in games involving group participation for part of the time. Some evidences of sympathy and cooperation.

Some evidences of aggression, especially if play materials are few. Actions determined in part by desire to win approval of mates or adults. Competition short-lived. Individual differences, in part due to experience, in degree of friendliness shown to strangers.

Can "take turns." Can learn to do things "for" other people. Much communication.

ESTIMATION OF DEVELOPMENTAL PROGRESS

Ages 8 to 12

Ages 13 to 18

24. Social Responses

Enjoys group games. Is both cooperative and competitive. Enjoys play with children of own sex but is sensitive to presence of and opinion of children of opposite sex.

Some children leaders over comparatively long periods of time. Sensitive to ridicule, failure.

May seem insensitive to minor social conventions.

Tends to have "best" friends.

Enjoys group games. Widens circle of friends to include some unknown to family, perhaps unacceptable to family. To some, being like other people seems the most important thing in life. Interested in playing with members of opposite sex as well as with own sex.

Thinks in terms of own contribution to group now and in future. Intensely loyal to friends, to heroes. Thinks in terms of large social groups; often interested in the down-trodden, the underprivileged. Group shows many love affairs, some being permanent and leading to marriage. Many adolescents carry almost complete responsibility for their families.

HEIGHT-WEIGHT-AGE TABLES FOR BOYS AND GIRLS OF SCHOOL AGE*

Prepared by
BIRD T. BALDWIN, Ph.D.

and

THOMAS D. WOOD, M.D.

In the preparation of these tables the aim has been to secure data concerning growth by observations upon those who might be considered healthy children. The children whose records are included in the tables were of good heredity and enjoyed environmental advantages, with school medical inspection, directed play, physical training, and instruction in hygiene.

In the schools from which material for the study was obtained, fully 95 per cent of the children are American born.

The data included in the tables are drawn from the records of 74,000 boys and 55,000 girls. From these gross figures there have been included 24,000 measurements for boys and 12,012 measurements for girls, who are presumably healthy and upon whom five to fourteen consecutive measurements have been taken, nearly all of these being at yearly intervals. The measurements were taken by trained examiners, with standard methods, and on nude children.

In order to extend the range of the tables so as to include weights of children who are taller or shorter than those in these groups, there have been added starred figures estimated weights. All the other heights represent averages for each inch in height and age of the children observed in this study.

Of greater importance than the weight or height at any given age is *the annual increment of growth*. In order to show the difference in the growth of tall, medium, and short children and to give yearly increments in weight, the middle 75 per cent of all children within each age group for height are classified as of medium height; the 12.5 per cent above this group, as tall children; and the 12.5 per cent below, short children.

These increments show that tall children have the acceleration in growth at adolescence, in both height and weight, earlier than medium children and that medium children have their acceleration earlier than short children.

For each year in the earlier ages (5 to 10 years) both boys and girls show a variation of 2 to 3 lb. in weight at each inch of height (read the weight column vertically). On the other hand, the weight for a given height varies little from year to year for the same period; however, after the eleventh year this increase is marked (read weights horizontally). These facts of the normal growth of adolescent children make it impossible to express proper weight for height without taking into consideration the age factor. *The average annual increment of the tables gives a general basis for comparison of the growth of tall, medium, and short children.*

The limitations of all growth tables should be recognized. They do not aim to present a complete clinical picture of a child's physical condition. Thorough examinations of children from the standpoint of growth, nutrition, and disease should be made before any arbitrary limitations can be fixed for underweight or overweight.

The range of variation within what may be considered normal limits is greater beyond the ages of 12 or 13 years than at earlier ages. It is impossible to fix definitely what this range is.

These tables are not to be regarded as a final statement of the weights of children of different races and of different economic status. At present there are not data available to determine the significance of these factors upon growth. Observations upon the same group of children over a period of years will be necessary to secure such data.

* Abstract of article published by American Child Health Association, 1923, now out of print. Used by permission of Dr. Thomas D. Wood and the American Child Health Association.

CHARACTERISTICS OF AGE LEVELS

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WEIGHT-HEIGHT-AGE TABLE FOR BOYS OF SCHOOL AGE

Height, inches	Average weight for height, pounds	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years
38	34	34	34*													
39	35	35	35													
40	36	36	36*													
41	38	38	38	38*												
42	39	39	39	39*	39*											
43	41	41	41	41*	41*											
44	44	44	44	44	44*											
45	46	46	46	46	46*	46*										
46	48	47*	48	48	48	48*										
47	50	49*	50	50	50	50*	50*									
48	53	...	52	53	53	53	53*									
49	55	...	55	55	55	55	55	55*								
50	58	...	57*	58	58	58	58	58*	58*							
51	61	...	...	61	61	61	61	61	61*							
52	64	...	...	63	64	64	64	64	64	64*						
53	68	...	...	66*	67	67	67	67	68	68*						
54	71	...	...	...	70	70	70	70	71	71	72*					
55	74	...	...	...	72*	72	73	73	74	74	74*					
56	78	...	...	...	75*	76	77	77	77	78	78	80*				
57	82	...	...	...	...	79*	80	81	81	82	83	83*				
58	86	...	...	...	...	83*	84	84	85	85	86	87				
59	89	...	...	...	...	...	87	88	89	89	90	90	90			
60	94	...	...	...	...	...	91*	92	92	93	94	95	96			
61	99	...	...	...	...	...	...	95	96	97	99	100	103	106*		
62	104	...	...	...	...	...	...	100*	101	102	103	104	107	111	116*	
63	111	...	...	...	...	...	...	105*	106	107	108	110	113	118	123	127*
64	117	...	...	...	...	...	...	...	109	111	113	115	117	121	126	130*
65	123	...	...	...	...	...	...	...	114*	117	118	120	122	127	131	134
66	129	...	...	...	...	...	...	...	...	119	122	125	128	132	136	139
67	133	...	...	...	...	...	...	...	...	124*	128	130	134	136	139	142
68	139	...	...	...	...	...	...	...	...	...	134	134	137	141	143	147
69	144	...	...	...	...	...	...	...	...	...	137	139	143	146	149	152
70	147	...	...	...	...	...	...	...	...	...	143	144	145	148	151	155
71	152	...	...	...	...	...	...	...	...	...	148*	150	151	152	154	159
72	157	...	...	...	...	...	...	...	...	...	...	153	155	156	158	163
73	163	...	...	...	...	...	...	...	...	...	...	157*	160	162	164	167
74	169	...	...	...	...	...	...	...	...	...	...	160*	164	168	170	171
Age, years		6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Average height, inches	Short	43	45	47	49	51	53	54	56	58	60	62	64	65	65	
	Medium	46	48	50	52	54	56	58	60	63	65	67	68	69	69	
	Tall	49	51	53	55	57	59	61	64	67	70	72	72	73	73	
Average annual gain, pounds	Short	3	4	5	5	5	4	8	9	11	14	13	7	3		
	Medium	4	5	6	6	6	7	9	11	15	11	8	4	3		
	Tall	5	7	7	7	7	8	12	16	11	9	7	3	4		

WEIGHT-HEIGHT-AGE TABLE FOR GIRLS OF SCHOOL AGE

Height, inches	Average weight for height, pounds	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years
38	33	33	33												
39	34	34	34												
40	36	36	36	36*											
41	37	37	37	37*											
42	39	39	39	39*											
43	41	41	41	41	41*										
44	42	42	42	42	42*										
45	45	45	45	45	45	45*									
46	47	47*	47	47	48	48*									
47	50	49*	50	50	50	50	50*								
48	52	...	52	52	52	52	53*	53*							
49	55	...	54	54	55	55	56	56*							
50	58	...	56*	56	57	58	59	61	62*						
51	61	...	...	59	60	61	61	63	65						
52	64	...	...	63*	64	64	64	65	67						
53	68	...	...	66*	67	67	68	68	69	71*					
54	71	...	...	...	69	70	70	71	71	73*					
55	75	...	...	...	72*	74	74	74	75	77	78*				
56	79	...	...	...	...	76	78	78	79	81	83*				
57	84	...	...	...	...	80*	82	82	82	84	88	92*			
58	89	...	...	...	...	...	84	86	86	88	93	96*	101*		
59	95	...	...	...	...	...	87	90	90	92	96	100	103*	104*	
60	101	...	...	...	...	...	91*	95	95	97	101	105	108	109	111*
61	108	...	...	...	...	...	...	99	100	101	105	108	112	113	116
62	114	...	...	...	...	...	...	104*	105	106	109	113	115	117	118
63	118	...	...	...	...	...	...	...	110	110	112	116	117	119	120
64	121	...	...	...	...	...	...	...	114*	115	117	119	120	122	123
65	125	...	...	...	...	...	...	...	118*	120	121	122	123	125	126
66	129	...	...	...	...	...	...	...	...	124	124	125	128	129	130
67	133	...	...	...	...	...	...	...	...	128*	130	131	133	133	135
68	138	...	...	...	...	...	...	...	...	131*	133	135	136	138	138
69	142	...	...	...	...	...	...	...	...	...	135*	137*	138*	140*	142*
70	144	...	...	...	...	...	...	...	...	...	136*	138*	140*	142*	144*
71	145	...	...	...	...	...	...	...	...	...	138*	140*	142*	144*	145*
Age, years		6	7	8	9	10	11	12	13	14	15	16	17	18	
Average height, inches	Short	43	45	47	49	50	52	54	57	59	60	61	61	61	
	Medium	45	47	50	52	54	56	58	60	62	63	64	64	64	
	Tall	47	50	53	55	57	59	62	64	66	66	67	67	67	
Average annual gain, pounds	Short	4	4	4	5	6	6	10	13	10	7	2	1	1	
	Medium	5	5	6	7	8	10	13	10	6	4	3	1	1	
	Tall	6	8	8	9	11	13	9	8	4	4	1	1	1	

TABLES FOR INFANCY AND EARLY CHILDHOOD*

ROBERT M. WOODBURY, PH.D.

These tables of average weights of boys and girls from birth up to 6 years of age are based upon data gathered during the spring and summer of 1918 in a nation-wide weighing and measuring of children inaugurated by the Children's Bureau. As a result of this campaign, record cards for over two million children from all parts of the country were received. From the cards which were signed by physicians, a selection was made of those for children without serious physical defects that might influence either height or weight, who were weighed and measured without clothing as verified by the physician signing the cards. A total of 167,024

cards for white children met all these tests and formed the basis for the fundamental tables from which the tables presented herewith were derived. These basic tables are published in *Statures and Weights of Children Under Six Years of Age, Children's Bureau Publication 87*.

The children included in the tabulation were 70 per cent of native parentage; 6 per cent had one parent native and one foreign born; 4 per cent were of British or Irish parentage; and the remainder were of Scandinavian, German, Italian, or other foreign stocks. They represented children from all parts of the country.

* Used by permission of Children's Bureau.

WEIGHT-HEIGHT-AGE TABLE FOR BOYS FROM BIRTH TO SCHOOL AGE

Height, inches	1 mo.	3 mo.	6 mo.	9 mo.	12 mo.	18 mo.	24 mo.	30 mo.	36 mo.	48 mo.	60 mo.
20	8										
21	9	10									
22	10	11									
23	11	12	13								
24	12	13	14								
25	13	14	15	16	15						
26	..	15	17	17	16½						
27	..	16	18	18	17½	18					
28	19	19	19	19					
29	20	21	20½	20½	20½				
30	22	22	21½	22	22	22			
31	23	23	23	23	23½			
32	24	24½	24½	24½	24½	25		
33	25	26	26	26	26		
34	27½	27	27	27½	27½	27½	
35	28½	28½	28½	28½	28½	29	
36	29½	30	30	30	30	30½
37	31	31	31½	31½	31½	32
38	32½	32½	32½	32½	33	33
39	34	34	34	34	34½
40	35	35	35½	35½	35½
41	36½	36½	37	37
42	38	38	38	38½
43	39½	39½	39½
44	40½	41	41
45	42	42½
46	43½	43½
47	45	45
48	46½
49	47½

NOTES:

1. Up to and including 9 mo., weight is stated to the nearest pound; height to the nearest inch; age to the nearest birthday.

2. From 12 mo. to 60 mo., inclusive, these columns represent a reanalysis of weight, height, and age of 63,547 white boys between 1 and 6 years of age examined in Children's Year. These weights are taken to the nearest half-pound.

This table presents results of two studies, which are not in complete agreement. In certain cases, children are made to appear heavier at 6 mo. than at 12 mo. These discrepancies are due to the different method employed in handling the basic data and are of no significance for the use we wish to make of this table.

WEIGHT-HEIGHT-AGE TABLE FOR GIRLS FROM BIRTH TO SCHOOL AGE

Height, inches	1 mo.	3 mo.	6 mo.	9 mo.	12 mo.	18 mo.	24 mo.	30 mo.	36 mo.	48 mo.	60 mo.
20	8										
21	9	10									
22	10	11									
23	11	12	13								
24	12	13	14	14							
25	13	14	16	15	14½						
26	..	15	15	17	16						
27	..	16	17	18	17	17½					
28	19	19	18½	18½	18½				
29	19	20	20	20	20				
30	21	21	21	21	21½	21½			
31	22	22½	22½	22½	22½	23		
32	23½	24	24	24	24		
33	25	25	25	25½	25½	25½	
34	26½	26½	26½	26½	26½	27	
35	27½	27½	28	28	28	28	
36	29	29	29	29½	29½	29½
37	30½	30½	30½	30½	31	31
38	31½	32	32	32	32½
39	33	33	33	33½	33½
40	34½	34½	34½	35
41	35½	36	36	36
42	37	37½	37½
43	38½	38½	39
44	40	40	40
45	41	41½
46	42½	42½
47	44
48	45½
49	46½

NOTES:

1. Up to and including 9 mo., weight is stated to the nearest pound; height to the nearest inch; age to the nearest birthday.

2. From 12 mo. to 60 mo., inclusive, these columns represent a reanalysis of weight, height, and age of 62,160 white girls between 1 and 6 years of age examined in Children's Year. These weights are taken to the nearest half-pound.

This table presents results of two studies, which are not in complete agreement. In certain cases, children are made to appear heavier at 6 mo. than at 12 mo. These discrepancies are due to the different method employed in handling the basic data and are of no significance for the use we wish to make of this table.

INTERPRETATION OF PSYCHOMETRIC TESTS

A comprehensive discussion of the merits and shortcomings of the so-called "intelligence tests" has no place in this volume. Such tests are widely administered, and their scores in terms of I.Q. and M.A. are widely, but not always wisely, used in classifying children and diagnosing their behavior. It is the business of teachers and school administrators who have occasion to interpret mental-test scores to be thoroughly informed as to their significance and their limitations. This subject is exhaustively treated in many modern texts. For the convenience of the student who has not immediate access to reliable modern sources of information on mental tests, there is included here a tabulation of significant information relating to a few of the more widely used tests. This tabulation is adapted from the White House Conference report.* There has also been included a brief review of the meanings of certain commonly used terms in the mental-testing field.

Significance of Terms Used in Mental Testing.

Individual mental tests are tests designed to be given to one child at a time by a trained and experienced person. The method of individual examination requires extensive training for its proper use. A standardized procedure must be meticulously followed; rapport must be established between tester and subject and full cooperation secured. The individual test gives the tester an opportunity for observation of the subject's mode of response. Interpretation of test results requires skill and insight. The time necessary for each test is considerable—from 30 minutes to an hour for each case.

Group intelligence tests† are given by one person to a group of children at one time. Procedure for group testing is so simple that it can be learned by any intelligent person in a few hours. The interpretation of a group-test score requires as much psychological expertness as the interpretation of a Binet score. Misuse of group-test scores is even more common than of a Binet score.

Group tests have less value than individual tests in appraising an individual child's mental equipment. Their greatest usefulness is in facili-

tating comparison of large groups of children. The results of a reliable group test may, however, be used with caution as indications of the probable relative speed of mental development of a child. Repeated scores at intervals of time have increasing value in diagnosis.

Mental age (M.A.) is a score on an intelligence test. The term is usually applied to a score derived from an individual test. It indicates the level (in terms of years and months) of intellectual development the child has actually reached at the time of testing. If he reaches the score usually made by a child of 10 years and 3 months of age, he is said to have a mental age of 10-3.

If a child is 10 years old and makes a score usually attained by a child of 12, we know that he has developed, thus far, faster than the average; if, on the other hand, careful testing reveals that he can do only as well as the average child of 8 years, we know that he has developed mentally more slowly than the average. If he makes a mental-age score of 10 years, his performance is just average for boys of his age.

Intelligence quotient (I.Q.) is the ratio which expresses how fast the child has developed mentally in comparison with most children. Knowing he has a mental age of 10 gives us no notion of how bright he is unless we also know how old he is. The boy mentioned above whose mental age matches his actual age is progressing at an average rate and is said to have an I.Q. of 100. The boy of 10 with the mental age of 8 has progressed only eight-tenths as fast as the average and is said to have an I.Q. of 80. The boy with the M.A. of 12 has progressed 20 per cent faster than the average and has an I.Q. of 120. This is usually expressed by the formula:

$$\text{I.Q.} = \frac{\text{mental age}}{\text{chronological age}}$$

The M.A. is useful in showing how far the child has come along the path of mental development. The I.Q. is useful in showing how fast he has come. The I.Q. gives a picture of only a part of his mental equipment and no notion at all of his special abilities, his social qualities, his industry, his likes, or his aversions, all of which will condition his general development and success in life. It should be used for what it is, a valuable but not infallible index of the child's probable speed in mental

* *Growth and Development of the Child*, Part IV, "Appraisal of the Child," White House Conference, pp. 44-57, Century Company, 1932.

† *Op. cit.* Freely adapted.

growth, his intellectual potentialities, and scholastic aptitudes.

Achievement tests are standardized examinations in school subjects. Scores obtained by their use are translated into statements of grade level or age level, as low sixth, 11 years 6 months. These tests are group tests. One of the most widely used batteries of achievement tests is the Stanford Achievement Test (S.A.T.), or the New Stanford Achievement Test (N.S.T.).

Personality tests are chiefly designed to measure characteristics of social or of emotional behavior. They are for the most part inadequate as to objectivity, validity, reliability. After adequate tests are available, age norms should be established. Some tests which seem to be fairly satisfactory are available but are not yet in use by public schools. These are listed and evaluated in the "Report of the Committee on Growth and Development," White House Conference, referred to above.

Adapted from Report of Committee on Growth and Development, Sec. I, White House Conference
Table prepared by Thomas Clyde Polson

Function to be tested	Adm.	Ratings	Title of test and publisher	Age range of test																		Remarks			
				Presch.			Elem.			Jr. Hs.			Sr. Hs.			Coll. Ad.									
				0	1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16		17	18	
Intelligence	Gr	Ind	Cha	Stanford Revision of Binet Scale— Houghton Mifflin Company																					Revision in preparation
Intelligence	X	++	++	Hayes Adaptation of Stanford Binet for Blind—S. F. Hayes, Mount Holyoke																					No information
Intelligence	X	++	++	Kuhlman Revision and Extension of Binet-Simon Scale—Warwick & York																					Especially good for early years
Intelligence	X	++	++	Haring Revision of Binet-Simon Test—World Book																					Reliability and validity probably below Stanford-Binet
Intelligence	X	+	+	Yerkes-Bridges Preadolescent Point Scale—Warwick & York																					No reliability and validity data
Intelligence	X	++	++	Merrill-Palmer Scale—World Book, Stoelting																					Reliability high
Motor development Language Adaptive behavior Personal-social behavior	X	++	++	Gesell Developmental Inventories— Described in "Infancy and Human Growth," Macmillan																					Show qualitative changes as growth progresses Need standardization
Motor development	X			Oseretsky																					Little information
Intelligence	X	++	++	Thorndike's CAYD C—Completion ability A—Analogical Reasoning V—Vocabulary F—Directions—Teachers College, Columbia University																					Especially good in predicting scholastic success. Individual test in lower ranges Group test in upper ranges
Intelligence through performance	X	+	+	Pintner-Paterson Performance Tests —Appleton, Stoelting																					Most useful for deaf or those with lan- guage handicaps Low correlation with other intelligence criteria
Intelligence through performance	X	0	0	Kohs-Block Design Test—Mac- millan																					Narrow sampling. Low reliability and validity
Intelligence through drawing	X	++	++	Goodenough Test of Intelligence by Drawing—World Book																					Most valuable brief performance test for this age level
Intelligence	X	++	++	Pintner-Cunningham Primary Men- tal Test—World Book																					Best group test for this age range
Intelligence	X	++	++	Oda Group Intelligence Scale, Pri- mary Examination—World Book																					Well standardized. Fair reliability
Intelligence	X	0	0	Dearborn Group Test of Intelli- gence, Series I—Lippincott																					Rather difficult to score and give
Intelligence	X	++	++	Haggerty Delta-I—World Book																					Reliability not high

+++ Outstanding test of its kind

++ Recommended

+ Recommended with reservations

0 Not recommended for use

These ratings are attempts by the author to translate W.H.C. evaluations into a brief scale.

+ Limited in usefulness

0 Not recommended for use

Group tests at this level have not proved satisfactory in making directions understood

PSYCHOMETRIC TESTS.—(Cont.)

Function to be tested	Adm.	Ratings		Title of test and publisher	Age range of test																		Remarks			
		G	Ind		Whc	Age range of test																				
						Presch.	k	Elem.	Jr. Hs.	Sr. Hs.	Col.	Ad.	Presch.	k	Elem.	Jr. Hs.	Sr. Hs.	Col.	Ad.							
Intelligence	×	+	+	+	National Intelligence Tests—World Book																				Convenient to give and score Norms based on large numbers	
Intelligence	×	+	+	+	Haggerty Delta II—World Book																					No alternate forms No data on reliability
Intelligence	×	+	+	+	Dearborn Group Test of Intelligence, Series II—Lippincott																					Low correlation with school marks, other tests
Intelligence	×	+	+	+	Otis Self-administering Tests, Intermediate Examination—World Book																					No data on reliability and validity Convenient to score
Intelligence	×	+	+	+	Terman Group Test of Mental Ability—World Book Company																					Given first place over all similar tests in comparative study
Intelligence	×	+	+	+	Otis Group Intelligence Scale Advanced Examination—World Book																					High validity. Time-consuming to give
Intelligence	×	+	+	+	Otis Self-administering Tests of Mental Ability, Higher Examination—World Book																					Easily given and scored
Intelligence	×	+	+	+	Army Alpha—Stoelting																					Of historical interest
Scholastic aptitudes	×	+	+	+	College Entrance Board Scholastic Aptitude Tests																					Best test of scholastic aptitude at college level (No private copies)
Intelligence	×	+	+	+	Thorndike Intelligence Examination—Teachers College, Columbia University																					Reliability and validity fair Expensive
Intelligence	×	+	+	+	American Council on Education—Thurstone, Washington, D. C.																					One of the best for college level
Intelligence	×	+	+	+	Ohio State University Test—Ohio State University Press																					No information given Widely used
Special ability: musical capacity	×	+	+	+	Seashore Tests of Musical Ability—Columbia Phonograph Records																					Valuable for predicting the possibility of educating a child or adult in music
Special ability: mechanical aptitude	×	+	+	+	Stanquist Test of Mechanical Aptitude—World Book, Stoelting																					Reliability low, validity fair
Special ability: mechanical aptitude	×	+	+	+	MacQuarrie Test for Mechanical Ability—Stanford University Press																					Reliability higher than Stenquist. Validity lower than Stenquist. Pencil and paper only
Special ability: mechanical aptitudes	×	+	+	+	Minnesota Mechanical Ability Tests—University of Minnesota																					Reliability and validity very high. Very useful in educational and vocational guidance
Special ability: mathematics	×	+	+	+	Rogers Test of Mathematical Aptitude—Teachers College, Columbia University																					Reliability good, validity moderate. Useful in sectioning 1st-yr. high-school mathematics aptitudes

STUDYING CHILDREN IN SCHOOL

PSYCHOMETRIC TESTS.—(Concluded)

Function to be tested	Adm.	Ratings		Title of test and publisher	Age range of test																		Remarks																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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+ Outstanding test of its kind
 ++ Recommended
 +++ Recommended with reservations
 +++ These ratings are attempts by the author to translate W.H.C. evaluations into a brief scale.
 + Limited in usefulness
 0 Not recommended for use

Note: Valid measures impossible at present.

Note: Personality not clearly defined.

Tests of same ability often not in agreement, especially of a special ability very difficult to measure.

KEY TO PSYCHOMETRIC TEST ABBREVIATIONS

Cal. I	California Preschool Test, Form I (Intelligence).
C.R.B.	Columbia Research Bureau Algebra.
D.P.I.T.	Detroit Primary Intelligence Test.
K.A.	Kuhlman-Anderson Intelligence.
M.Mc.	Morrison-McCall Spelling.
N.I.T.	National Intelligence.
N.S.R.	New Stanford Reading.
P.C.	Pintner-Cunningham Intelligence.
S.A.T.	Stanford Achievement Test.
S.B.	Stanford Binet, also written S.R.B.—Stanford Revision of the Binet (Intelligence).
S.P.	Seaton-Pressey English.
Ter.	Terman Group Intelligence.
Th.McC.	Thorndike-McCall Reading.
W.McM.	Woody-McCall Mathematics.

See also pp. 46, 47.

KEY TO ACHIEVEMENT TEST SCORES**Gates Primary:**

1. Word Recognition.
2. Sentence Reading.
3. Reading of Directions.

Gates Reading:

1. Paragraph.
2. Reading to predict outcome of given events.
3. Dictation.
4. Ability to note detail.

Stanford Achievement Tests:**Reading.**

1. Paragraph meaning.
2. Word meaning.

Arithmetic.

1. Reasoning.
2. Computation.

Unit Scale Tests:**Arithmetic.**

1. Problem solving.
2. Operation.

Language.

1. Capitalization.
2. Punctuation.
3. Usage.

Reading.

1. Reading.
2. Literature.

STUDYING CHILDREN IN SCHOOL

THE USE OF TIME BY HIGH SCHOOL STUDENTS*

7th Grade
(70 boys, 59 girls)

11th Grade
(36 boys, 78 girls)

Time of Rising

Peak hour 7:30 to 8:00

7:30 to 8:00

On week ends more than 50 per cent up before 8:00 On week ends almost three-fourths in bed after 8:00

Time of Retiring

Peak hour 9:00 to 10:00

10:00 to 10:30

On week ends one in five go to bed after 12:00

Boys in bed earlier than girls

Hours in Bed

Peak 9 to 10 hr.

8 to 9 hr.

On Sunday night one in five with fewer than 8 hr. On Sunday night one in seven with fewer than 8 hr.

Girls in both grades have less sleep than boys

Meals

Boys missed meals regularly

One-sixth of girls missed either breakfast or lunch regularly

Hours of Study

Middle one-half of boys studied $1\frac{1}{2}$ to 5 hr. per week Middle one-half studied 3 to 10 hr. per week

Middle one-half of girls studied $1\frac{1}{2}$ to 4 hr. per week

Gainful Employment

More than one-fourth of the boys, none of the girls
Middle one-half from 5 to 7 hr. per week

Two-fifths of the boys, one-sixteenth of the girls
Average 21 hr. per week.

Helping at Home

Three-fourths of the boys and practically all of the girls
Average $4\frac{3}{4}$ hr. per week

Three-fifths of the boys and all the girls
Middle one-half of boys 11 to 29 times per week
Middle one-half of girls 2 to 18 times per week
Almost all of the girls and half of the boys helped with meals

Clubs (outside School)

More than one-third of the boys, one-sixth of the girls

One-third of the boys, one-eleventh of the girls
Average time for boys per week—5 hr.
Average time for girls per week— $2\frac{1}{2}$ hr.

Lessons and Practicing

About one-third of both classes

Average 25 min. per day for boys
Average 40 min. per day for girls

Average $\frac{1}{2}$ hr. per day

Religious Organizations

One-half of 7th grade

One-third of 11th grade

Leisure Time

Average $3\frac{1}{2}$ hr. per day for boys, 3 hr. for girls, 26 to 36 hr. per week

Average 30 to 32 hr. per week

Activities in order: "playing," reading, baseball, radio, movies

Activities in order: visiting, reading, automobile riding, movies

9 report no movies, 42 one, 17 two, 9 three, 1 four, 1 five

* Summarized from E. W. Bailey and A. D. Laton, Use of Time by High School Students, *University High School Journal*, vol. 12, No. 1, 1932.

THE USE OF TIME AS REPORTED BY 1,300 HIGH SCHOOL STUDENTS

(This material is based on a study made by Mrs. Jessie D. McComb and offered in partial satisfaction of requirements for the degree of Doctor of Philosophy in The University of California, May, 1936.)

The points considered were: to ascertain the week's pattern of use of time by the whole school population and to discover the variation between school days, when school dominates the use of time, and week ends, when the pupils may be free from this domination to some extent. Are differences in the amount of time spent in various activities correlated with sex, with intelligence quotient, or with health factors? Does the amount of time spent in various activities by pupils in a union high school, whose population is drawn from small town and rural districts, differ significantly from that of a group constituted largely of pupils in a city high school?

Time charts were obtained from 1,305 pupils at University High School in grades seven to twelve inclusive; these were collected in May, 1929, over a period of 7 days. Two years later, in the spring of 1931, time charts were collected from 426 pupils

Information on school marks, results of intelligence tests, health rating, special interests were obtained for each pupil who filled out a complete set of time charts. This information was used in making comparisons between a pupil's use of time as reported in the time charts and his success in school as shown in school marks; or between his use of time and his mental ability as measured by his intelligence quotient; or in making comparisons between the activities of the whole group and those of the group rated as having defective vision, defective hearing, or other bodily handicaps.

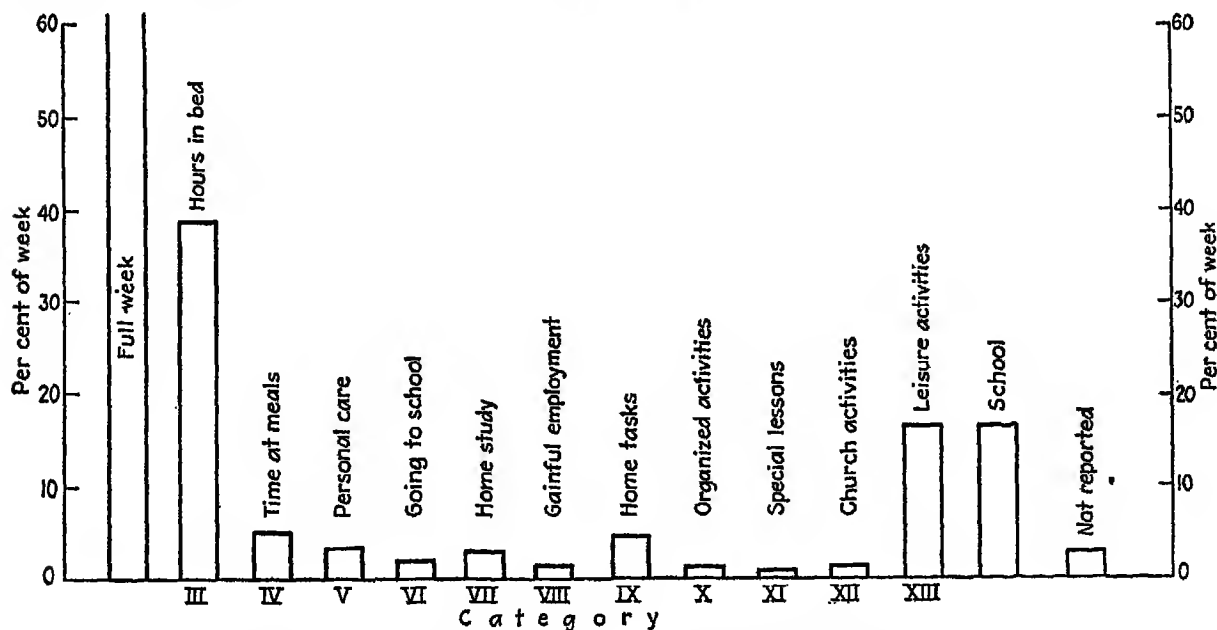
Three additional groups were made for comparisons of members of the whole group who had certain health defects. These included (1) 289 pupils with defective eyes; (2) 36 pupils with ear defects; (3) 30 pupils with heart defects.

The accompanying graph represents the part of the week devoted to each activity, as shown by percentages:

Use of Time by Special Groups.

Rural and village as contrasted with city:

20 per cent fewer reported time in organized activities.



at University High School in the ninth and tenth grades. Time charts were collected again in University High School in 1934 from 541 pupils and in the same year from 332 pupils in the Sonora Union High School.

12 per cent reported time in church activities. 24 per cent reported time in "Talked," as leisure activity.

More time spent in traveling to and from school. More time in home tasks.

In general, rural children have a reduced margin of time capital for home study and extracurricular activities; their time must be most carefully planned.

High I.Q. contrasted with low I.Q.:

Greater freedom from gainful employment.

Less time spent in home tasks.

Greater participation in group activities.

The students having highest intelligence quotients are in favored economic positions.

High scholastic rating contrasted with low scholastic rating:

Greater freedom from gainful employment.

Less time in home tasks.

Greater participation in group activities.

Less leisure.

The group having low scholastic rating, as compared with the whole group, spend less time in home study, take very little part in organized activities, have a great deal of leisure. School life is "endured;" has never become a vital part of their lives.

Physically defective group. Distribution of their time is similar to that of the whole group.

With defective vision: later rising hour, more time in bed.

With defective hearing: report less talking, less group activity.

With defective hearts: 2 hr. more time in group activities per week and 3 hr. less leisure than the whole group reported.

Implications for school administration with regard to these groups: School policy should permit variation from the prescribed routine for:

1. Individuals who are gainfully employed steadily and for a great number of hours every week.

2. Those who have to help with the family business (another form of gainful employment).

3. Those with health defects of a somewhat permanent character.

4. Those convalescing from illness.

5. Those who belong to families in which emergencies are causing pupil strain.

Implications for dealing with individuals who differ greatly in some respect from the group or whose physical handicap is severe: Flexibility in school schedules, program, special services in extracurricular opportunities: and reference to proper authorities where time study reveals special needs.

CHAPTER IV

USING EVERYDAY MATERIAL IN THE STUDY OF CHILDREN

The following exercises are designed to give practice in various aspects of studying children. They should supplement but not take the place of first-hand studies of children. Teachers may find it valuable for some classes or for some individuals to work through all these exercises; other classes or other individuals, because of previous experience, need relatively little practice before engaging in their own studies.

A number of studies of children in schools have been included for use in the various exercises. These were made by students from their own observations and study of school records. They illustrate the kinds of material available in schools and the activity records which any teacher can make. None contains all the information we would like to have; the best school records have many gaps. They do, however, give the thoughtful teacher useful guides toward understanding. By skill in organizing such material and by careful

interpretation in the light of what is known about children he can gain clearer insight into his pupil's abilities, interests, successes, and failures and can be better able to give them assistance and guidance.

Although certain studies have been referred to in each exercise, almost any study can be used in any of the exercises. Studies are found on pages 57-61, 84-86, 87-93, 94-96, 97-101, 104-107, 108-117, 118-124, 125-131. The teacher may wish to assign several of these for drill in one exercise or may vary the assignment from semester to semester or from group to group.

Directions for first-hand studies of children to which these exercises are preliminary will be found in Chapters V, VI, and VII; the forms to be used in these studies, in Workbook I, "Study of Child in Preschool," Workbook II, "Study of Child in Elementary School," Workbook III, "Study of Child in Secondary School."

Exercise 1. How do a child's capacities and experiences influence his development and success?

Purpose: To practice thinking about a child as a whole, considering various aspects of him in relation to his complete self, throughout his life span.

Directions:

A. Read the "Study of Boy in Elementary School," pages 57-61 in order to get a general impression of the child.

Most modern schools have records at least as good as these available for use by teachers; useful activity records can be made by anyone who has had the training which this course will give you. You are therefore learning in this exercise to use the kinds of material which will be available to you during your actual teaching service. Your problem is to recognize the hints which this information gives as to the present well-being and future possibilities of the child in question.

You have here some specific evidence concerning this child's bodily and mental equipment, school progress, and social relations. Each of these aspects of his life exerts some influence on every other aspect; each is what it is because of the child's past history and native endowment; and each will have its share of significance for his whole future. For instance, his health, today and during earlier life, is a factor to be taken into account in thinking of his school history and progress, of his special abilities and disabilities, of his behavior in response

to his elders, his mates, younger children, of his feelings of achievement and success. It also raises many questions in our minds as to his "constitution," his place in his family circle, his rate of progress toward independence and self-direction. His bodily well-being, or ill-being, as the case may be, stands as a critical factor to be taken account of in planning for him; this concern with his health as an aspect of him is quite independent of any concern for diagnosing or treating his health handicaps.

B. Collect information under the following headings:

1. Child's age and grade at time of observation.
2. Home and family.
3. School environment.
4. Growth and health.
5. Developmental level: intellectual ability, school progress, and success.
6. Social maturity.
7. Attitudes toward himself and his surroundings. "How does he feel about all these things?"

C. Considering all you have learned about Karl and his home and school, list some of the opportunities which should be offered him at home, in school, and in the community which would capitalize his abilities and past experiences and further his development and success.

STUDY OF BOY IN ELEMENTARY SCHOOL

Name: KARL

Date of birth: August 11, 1923

Birthplace: California

School: Washington Elementary School

Class: H3 and L4

Studies: October, 1931, February, 1932

General Impression and Health

	Observers' reports, fall, 1931	Observers' reports, spring, 1932
1. Personal attractiveness.....		Pleasant, wholesome
2. Clothing.....	Suitable	Not so neat as he could be
3. Facial expression.....	Alert, interested	Alert, happy; <u>sometimes bored</u>
4. Expressive movements.....	Many gestures; smiles often	Smiles often
5. Voice.....	Pleasant	Clear, pleasant
6. Bodily repose.....	A pencil, his hand, fingers or some <u>other object seem to be always</u> <u>in his mouth. Plays with pen-</u> <u>cil, eraser, etc.</u>	Too much "fidgeting." Seems to have to be doing something all the time, scratching his ear, standing on one foot then the other, etc.
7. Endurance.....	No observation or records	No chance to observe. No records
8. Size and build.....	Small but solid	Asthenic type, skeletal frame small
9. Posture and gait.....	Fairly good	Posture fairly good. Inclined to "slouch." Muscular coordina- tion good
25. Teeth.....	Braces on teeth to straighten them	Not so well formed as they might be. No braces
25. Arms and legs.....	Well shaped and well formed	Straight long bones
25. Wrists, knees.....	Not noticeably large	Inner and outer sides of ankles appear to be equally prominent
26. Hair.....	Dull. Tousled	Plentiful and lustrous
26. Eyes.....	Bright	Bright and clear. Blinks his eyes often
26. Skin and subcutaneous tissue..	Pink. Solid, not flabby	Olive complexion. Cheeks quite pink. Subcutaneous tissue not overly plentiful. Firm
27. Musculature.....	Muscles firm and strong	Not conspicuously developed
28. Nose.....	Mouth open most of the time; so <u>conclusion is that he breathes</u> <u>through his mouth.</u>	<u>Generally breathes through</u> <u>mouth</u>
29. Feet.....		Appear to be strong and straight

STUDYING CHILDREN IN SCHOOL

Activity Record

Place: Washington Elementary School. Time: 11:00 to 12:00

Date: February 23, 1932

begins at 11:10: Karl is class president. Stands against west wall facing the groups. Raps his gavel on table at his right. (Holds gavel in his right hand.) Says, "Class come to order. Who have presentations?" Three pupils raise their hands; teacher makes the fourth. He says, "Miss Jones, number 1," and so on, giving each pupil a number: respectively, 2, 3, and 4. Karl says, "Miss Jones will give hers first." He moves back against the wall when teacher begins to speak. Leans against the board, plays with the gavel, but takes no apparent interest in the discussions, though he does not look bored. Holds gavel in right hand, scratches his head with his left hand. His posture not particularly good; is leaning against the wall, with his weight mostly on right leg. Rubs gavel over his face. Crosses right leg over left foot. Now stands away from wall, legs at sides, weight supported on both feet only.

Second five minutes: Karl calls for presentation number 2. A girl rises from her seat to give her report. She has some newspaper clippings. They are pictures of George Washington. She stands in front of Karl; he looks over her shoulder at the pictures while she reads the headings. His mouth is open. Girl turns to him and shows him the pictures. Karl smiles at her. When he has finished looking at them, she holds the paper up for the class to see. Karl is interested now. He listens to the other pupils' discussions. He is still standing, good posture. Keeps looking at the pictures the girl has. But she is "dragging out" her report. Karl starts walking a few steps up and down. Now he stops, plays with the gavel again, puts handle of it in his mouth. Takes it out. Winks his eyes. Pulls up his trousers with his right hand, scratches his ear.

Third five minutes: Folds his arms in front of him; gavel held in his right hand. Girl is still "dragging out" her talk. Karl is fidgeting. Evidently thinks she is taking too much time. Now he rubs the gavel along his face and neck. Now he leans on a chair, his left arm resting on the back of it, his right arm crossed over the left. Now he rubs the gavel up and down his nose, now in his mouth. The teacher tells him something (indistinguishable). Karl says to girl, "Hurry up,

Margaret." Teacher tells girl to save the rest of her talk for the next time.

Fourth five minutes: Karl calls for number 3. She is a little slow in getting started. Karl tells her to hurry. She has some interesting pictures of George Washington too. Karl looks at them with interest. She does not have much to say, sits down. Karl calls for number 4. Karl now stands with his right foot crossed over the left. Number 4 has a book with pictures of old California missions in it. He tries to read something under the picture. He is unable to pronounce the Spanish names. Karl comes to his rescue, reads clearly and easily. Having done this, he moves back. Fidgets again. Puts his left hand in his pocket. Takes it out and scratches his face. Puts his left hand behind his back. Continues to rub gavel up and down his face.

Comments of Observers:

October, 1931: "Appeared rather absent-minded during class work. Sucked his pencil, played with his eraser, etc., but eventually finished the work; receives very good grades. Tends to his own work and does not bother others." . . . "Showed interest and curiosity in the observers. In a way he appeared a leader of some of the boys (when he told them to be quiet, they did so). He is interested in himself and his doings. I do not believe he has a very clear sense of himself as a member of society."

February, 1932: "He is quiet yet alert and attentive to what is taking place around him. Took an active part in class program. Does not appear to be shy or afraid."

February, 1932: "He appeared contentedly absorbed in his own work and thoughts. Made little effort to respond of his own accord. From observation, possibly he is inclined to be slightly self-centered."

"Although Karl keeps to himself a great deal he is extremely popular with the members of his class, and they profess a sincere liking for him. His teacher thinks a great deal of him too and considers him an 'alert little chap.'"

Observation: School Environment

Class management: 10:00 A.M., February 21, 1932: Children sat on top of desks or on floor, not

in seats; postures relaxed, easy. One child after another showed pictures related to the class work; others watched and listened. Class president (Karl) in charge; teacher indirectly in control. Apathetic response of class to one "presenter"; good response to another. Teacher holds attention of class spellbound for 5 min. Boy then begins telling a story, talking swiftly; class attention wanders; second boy asks what "stampede" means; and a third boy steals the floor by offering a definition and rushing rapidly on to tell a long tale of his own, centered about a stampede. Teacher says it is not his turn, starts first boy off again. One boy whispers, giggles, pushes other boys around; teacher speaks sharply to him, threatens to "excuse" him from room. Other boy

talks to neighbors, pushes boy next to him; is "excused" from room.

Comments of Observers:

"Children were learning to develop leadership, to overcome shyness" . . . "learning to connect school with outside life." . . . "More than a little tendency to show-offishness." . . . "The recitation was very democratic and the children spoke when they had something to say." . . . "Impression was that the children were being given a little too much responsibility for their stage of development." . . . "Children are free from prolonged physical restraint." . . . "Teacher is not trying to do things for the children, to see things for them. They do and see for themselves."

Exercise 3. What can we learn from a record of a child's activities?

The material that we learn from a child's activities is useful in estimating developmental progress and adaptive success. When trying to obtain his intellectual capacities, methods of solving problems and self-direction are important in obtaining this. Capacity for self-direction is shown in his conduct times when not under compulsion.

We are able to learn the characteristics, tastes, interests, and abilities of the child studied. Then we can compare these with children and find out whether the child studied is average or above average.

STUDYING CHILDREN IN SCHOOL

Purpose: To study the responses of a child as indicators of his characteristic tastes, interests, and abilities, of his level of maturity, of his success or failure in adaptation.

Sections:

4. Read an activity record selected from those pages 70, 71, or from case studies on pages 84-131. Analyze this to find (1) the activities engaged in by the child during the time in which he was observed and (2) the characteristics of personality and behavior which he showed while engaged in these activities.

This material is useful in estimating developmental progress and adaptive success. The methods of solving problems and the amount and quality of self-direction shown are especially important when you are trying to appraise the child's intellectual capacities. His orientation is shown in these traits, but to some extent in all the other traits as well. His capacity for self-direction is shown in his conduct at times when he is not under compulsion or where opportunities are offered him for independent action.

Activities engaged in

ay: sensory Lawrence watches others and then tries to do the same thing. He touches the clay and works with it. He puts in few small pieces of clay in his mouth.

manipulative Pushes a doll buggy. Rides a tricycle. Draws. Works with clay. Tears paper. Hammers with nail. Climbs bars. Pushes train on table.

dramatic Ray tries to take Lawrence's wagon. "No, mine" is the very dramatic answer. Cries "Water" in sing song voice. Fusses and cries when in trouble.

other (Neatful: Cleans paper up around ground. Keeps taking and depositing in waste basket.) Plays tricycle in garage in corner. Plays with small objects in garage.

Work: personal care Cared for by director. Helps Lawrence get out of unpleasant situations—especially if he is hurt. Wears apron when working with clay.

services to others Cleans up paper around grounds. Gets doll for girl.

other tasks Pushes doll buggy. Watches others.

Meeting interruptions and new situations

Ray tried to take his buggy so Lawrence let him have it. New situation was the hose. Lawrence got tangled up in this and he became extremely frightened. The director came to his rescue.

ANALYSIS OF ACTIVITY RECORD

Characteristics of behavior and personality shown while engaged in these activities

4. Expressive movements
*Expression of mild interest
Expression only slightly determined*
6. Bodily repose
Much endurance. Seems very relaxed although very active.
7. Endurance
The twenty minutes that Lawrence is being watched find him active and busy each minute. He rides the tricycle a great deal and has a great deal of endurance.
9. Posture and gait
Not mentioned but probably average.
10. Manipulative skill, use of preferred hand
No mention is made of preferred hand, but it seems that he does things easily. He draws, works with clay, hammers, climbs, etc.
11. Gesture as means of communication
Tells his playmates Good-Bye and waves to them.
11. Speech as means of communication
Does say "Good Bye" to children watching him as he rides his tricycle. Repeats it again and goes into garage.
17. Emotional control
Very good. When in trouble calls for assistance and doesn't get too excited.
18. Attention span
Enjoys watching other children work. Then tries to do what he sees them doing.
19. Methods of solving problems
When too involved for his own help, calls for direction.
20. Conduct in relation to other living things and to inanimate objects
Conduct toward his playthings and surrounding excellent - even picked up papers on ground.
22. Self-direction
Manages to carry on very well by himself. Could probably carry on without aid of director for a while.
24. Conduct in relation to other persons
Gets along with all of his playmates very well.

ACTIVITY RECORD—PRESCHOOL CHILD

Child: LAWRENCE, age 22 months July 22, 1929

11:12: Pushes doll buggy slowly, fingers to mouth, left thumb in mouth. Stops to watch adults, continues on with buggy, leaves it near platform, goes in house, brought out by director. Goes back to buggy, pushes it slowly up to drawing board, stops to watch girl at the board, steps back, and holds handle of buggy while still watching girl. Another girl runs up and grasps handle of buggy, trying to pull it from him. L. holds on but says or does nothing; expression only slightly determined. Director watches them a minute and then says, "That is Nancy's." He lets go and goes to drawing board, watches others drawing, watches adults, expression one of mild interest.

11:17: He takes crayons from tray beneath drawing board as he has just seen girl do, puts them in near-by wagon. Boy tries to take wagon; L. says "No, mine." Draws wagon up by drawing board, tears used paper from board, puts it carefully on the ground, takes paper from the other board, and starts to lay it on the ground. Director suggests putting it in waste basket; he runs and does so; carries it in right hand. Comes back for piece on ground; wads it up, and runs with it to the waste basket. Comes back and tears off clean sheet. Wads, stops to watch other children, takes wad of paper to basket, comes back, and tears off more paper, but director stops him, telling him that it is still nice and clean. He stops tearing and stands merely looking on, watching a boy at the other drawing board.

11:22: Draws on board with right hand, runs and takes hose from boy, carries one end of hose while two other children carry the other. Copies their cry of "water" in singsong voice; face has lighted up. Director gives hose end back to other boy. L. runs after children with hose, fussing, not crying. Gets tangled in hose, tries to pull it away. Squals, not loudly, with fright. Director talks to him and gets him out of hose. He goes to the tricycle and gets on it. Boy comes up and they talk. L. interested. Smiles, meanwhile placing and replacing feet on pedals; says, "Good-by," laughs at other child, sits watching; tricycle in sand, gets off tricycle, says, "Good-by," and pushes it up to garage. Goes in garage and places tricycle in corner. Plays with small objects at table. Gets on tricycle and rides around in garage. Rides out and watches children and director. Rides

slowly to near tool table. Gets off, watches, takes hammer with right hand and nail from girl. She cries. Another boy takes hammer from him; is pushed down, becomes angry; girl tries to get nail. L. runs across yard to climbing bars and goes up them very efficiently and easily.

11:27: Comes down from bars, sits in box, finds he can't get out, fussing and crying slightly, looking around for someone to help him. Director comes and helps him. He goes to garage, pauses, goes in garage, pushes train on table, comes out, goes to table where children are playing with clay. Watches them, puts on apron; trouble getting neck strap over head; persists until he gets it, plays with clay, pats it out and pretends to eat it, looking to see if anyone is noticing him. Picks small bits of clay out of piece with left hand and throws them on ground. Seems to be doing this unconsciously as he is giving his attention to what is going on around him. Gets doll for girl.

ACTIVITY RECORD—PRESCHOOL CHILD

Child: BETTY, age 3 years

July 18, 1930

10:20: Sitting in sand box putting sand in pan. Gets up and takes pink cloth and wraps it around dish. Gets out of box. Goes to a tree to put pan in crotch of tree. It falls and spills; says, "Upsa daisy, upsa daisy," picks up pan and covers it with cloth again. "Come on Mary, going for a ride, going for a ride." Runs to sand box for spoon. Stumbles out of sand box. Calls, "Mary, Mary." Puts pan, cloth, and spoon in red coaster wagon. Keeps calling to Mary in sand box, who refuses to respond. Starts to pull wagon. Pauses to watch boy hit bush with a stick. "Don't jump on rods, Mary." Drops handle of wagon. Runs up plank to jungle gym and swings on second rods. "Never did what I can do." Climbs up higher and jumps to ground. Partially chins self. Listens to little girls say, "Right here." Betty: "Can't see, can't see, show me." "I see, I see. Mary, I'll show you." Mary falls, hits lip, and cries. Betty watches attendant carry her away. Then she goes on climbing and swinging, but not up to the highest rods. Works way over on bars to a plank. Jumps up and down on plank. Says, "Hey, little girl," says, "Haha, Betty." Keeps bouncing up and down on plank. Jumps off. Gets on plank again. Starts to walk up it. Says, "Ah." Jumps off. Lifts up one end of plank and pushes it through

rods to other side. Says, "I'm strong, I am. See how hard I can push it." Grunts. Runs over to other side of jungle gym. Teeters on plank, then runs over to the garage for a blue box.

10:25: Runs back with blue box. "Look, Mary, what I'm doing." Puts box under end of plank. "Mary, come back." When Mary fools with box, Betty says, "No, Mary, no." "No, we go up this way." Not mean. Climbs up plank a way and jumps off, landing in a crouching position. Says, "Haha." Climbs up teetering plank and down again. Removes box from under plank, which doesn't rest on the ground now. To Mary, "I'm going to put it back. All right, Mary, look, Mary, isn't this high?" Climbs up plank, swinging over from one of the bars. "There, Mary, now you can." Teacher comes to place one end of board on ground, "Betty doesn't want to teeter-totter." "Hey, did I call you a crybaby?" "Because you want to get down." "Hey, Mary, Mary." "Don't you want to see me jump down? I have a new way, I got—I can get up a new way. Mary, Mary." Has climbed up again to second row of bars and now jumps off. To a boy, "I can get up that way, I can get up that way." Runs off for a tricycle. Comes back to jungle gym riding tricycle. "I can get up that way. You never saw me." "Mary, Mary, Mary." Rides around toward the work tables where Mary is. Betty answers little girl at the work table where there are hammers and blocks of wood, "Mine did too. My mother bought this new sun suit, too." Watches others at table for nearly 2 minutes, straddled on tricycle.

10:30: Reaches over and gets hammer out of box, after getting off tricycle. Gets back on with hammer in hand. Straddles tricycle as she reaches for nails. Keeps looking into box of nails. Picks one out and puts it in mouth and chews on it. Sits there for several minutes. Hammers on wood finally, then gets off tricycle. Lays down nails and just hammers on block of wood. Throws nails she had taken back into box. Puts down hammer. Walks over to table where saws are kept. Turns handle of bit. Then walks back to tricycle and mounts, pedaling over to low fence where she watches a small boy. Talks to teachers. Shouts, "Betty going on a vacation. Going to see granpa. Mother's coming for me. Have to have clothes on." Jumps off tricycle and runs to group at table working with clay and addresses

them, "I am going away. I'm going away. I'm going to a farm." Screams. Runs to children close by and shouts, "I'm going away. I'm going tonight. My mother's coming right away." Is told by attendant to go and put on her clothes. Runs to the back of the yard where the clothes are pinned on a line. Tells attendant there, "I'm going away. Going on a big choo choo. I won't be back for a week or two." Starts to take off sun suit. Attendant unfastens the straps. "I'm going to see my granpa." Tells a little girl, "I'm going on a vacation. I won't be back for a week or two." Is handed her combination. Takes quite a few seconds putting it on and keeps saying, "I'm going away and I won't be back for a week or two. Have to put on clothes. I'm going away." Gets into combination by self. "I'm going to get ready for tonight. My mother's coming early." Attendant slips petticoat over head. Betty helps to pull her dress down.

10:35: "I'm going to see Junior and Earle. My Junior and Earle. My Junior and Earle. Not for a week or two. Not going to be back for a week or two, for a week or two." Runs over to several children, saying about the same sentences varied with, "I'm going on the choo choo. I'm going to my granpa's farm." Goes to another girl and says, "I'm going to ride on a pony. Ride on a choo choo." Tells two boys the same thing. Notices children at other end of yard drinking orange juice. "Oh, I didn't have my orange juice." Runs down to table. Waits until glass is handed to her. Drinks orange juice down without pausing. Wipes mouth with paper napkin and walks over to basket and throws it in. Runs over to stairs and platform, shouting, "I'm going to see Junior and Earle." Mary over by platform is told, "I'm going tonight. I'm going on a vacation and I won't be back for a week or two. I'm going on a choo choo. I'm going to see my granpa." Climbs up on the outside edge of platform and goes around it, grasping the railing and putting feet between slats. Puts one leg over banister but takes it off again and walks down three stairs, using alternate feet, and hops from the third step to the ground. Runs over to wading pool and says, "You musn't splash me." Edges back as splashing begins, saying, "Don't splash me." Takes down board covering steps to slide. Goes up steps and slides down, then walks part way up the slide. Mother arrives and Betty, seeing her, runs to meet her.

B. Make an activity record by observing and describing in detail a child's activities for about 20 min. Analyze on pages 74, 75.

ACTIVITIES OF CHILD

Adults in group: Male _____ Female _____ Ages, approximate _____

Children in group: Male _____ Female Female Ages, approximate 10

Child CARMEI Place ST. FRANCIS Date OCT. 6th Time 1:10 Observer H4SELF

First five
minutes

Sister is giving an assignment on black printing. Carmel sits very attentive as sister speaks. The first block is "S." She completes this block very quickly. Looks around and observes other people and their work.

Next block is "T." She has a troublesome time with this. Does much erasing. Talks to the boy in front of her. Calls sister to keep her with her "T." Boy in front of her takes her paper and wants to keep her. Sister tells Carmel to please do her own work.

Second five
minutes

Class is not making "O" while Carmel is still on "T." Finishes this and draws the new letter in the air first. Puts in down on paper and traces it. Tries again. Holds her paper up and looks at it from a distance. Likes it; therefore, sits with hands folded waiting for sister to give new letter.

Starts working on "O" before sister is through explaining. Doesn't make it correct so erases it. She turns around and looks at me and smiles. Puts her eraser in her mouth while waiting for the next block.

ACTIVITIES OF CHILD

Third five
minutes

Brushes her hair from her eyes. Starts to work again before sister finishes new letter on black-board. Boy in front of her turns around and grabs her ruler. She is very upset. He returns it directly and she buries her head again in her work. Turns around and looks at the boy in back of her.

She makes her "T" now again and erases it. Starts again. Calls to the boy across from her. Shows him her work. Turns around and looks at me. Blows on her work. Sister comes over and corrects her work. Tells her to use her ruler.

Still erasing her "T" as class work on "I".

Fourth five
minutes

Now making "I" as sister gives new letter "H". She looks up. Rolls her pencil between her fingers as she watches. Scratches her nose. Takes her pencil and shakes it in the air. Works on letter. Looks up at boy and then starts ruler.

Working on "H" as sister gives last letter "E." Looks at the board. Asks boy in front of her for eraser. Moves around in her chair as she works. Finishes her printing - "STUDY TIME". OTHERS ARE ALREADY COLORING.

RESTS HER HAND UNDER CHAIR. BOY WALKS ERASER. COLORS HER WORK BLUE. VERY INTENT UPON HER WORK NOW. LOOKS AT BOY ACROSS AIS FROM HER.

ANALYSIS OF ACTIVITY RECORD

The activity record (pages 72, 73) presents a mass of detail which must be analyzed and organized before its significance can be understood. This analysis should show (1) the activities engaged in by the child during this time and (2) the characteristics of personality and behavior which he has shown while engaged in these activities. These characteristics are true for the child studied, at this time and place. Other observers may find the same child exhibiting characteristics quite the opposite of those shown in this situation.

This material is useful in estimating developmental progress and adaptive success. The methods of solving problems and the amount and quality of self-direction shown are especially important when you are trying to appraise his intellectual capacities. His orientation is shown in these traits, but to some extent in all the other traits as well. His capacity for self-direction is shown in his conduct at times when he is not under compulsion or where opportunities are offered him for independent action.

23. Activities engaged in

 Play: sensory

 manipulative

 dramatic

 other

 Work: personal care

 services to others

 other tasks

 Meeting interruptions and new situations

ANALYSIS OF ACTIVITY RECORD

Characteristics of behavior and personality shown while engaged in these activities

4. Expressive movements

6. Bodily repose

7. Endurance

9. Posture and gait

10. Manipulative skill, use of preferred hand

11. Gesture as means of communication

11. Speech as means of communication

17. Emotional control

18. Attention span

19. Methods of solving problems

20. Conduct in relation to other living things and to inanimate objects

22. Self-direction

24. Conduct in relation to other persons

Exercise 4. What can we learn concerning the growth and health of children by a study of records?

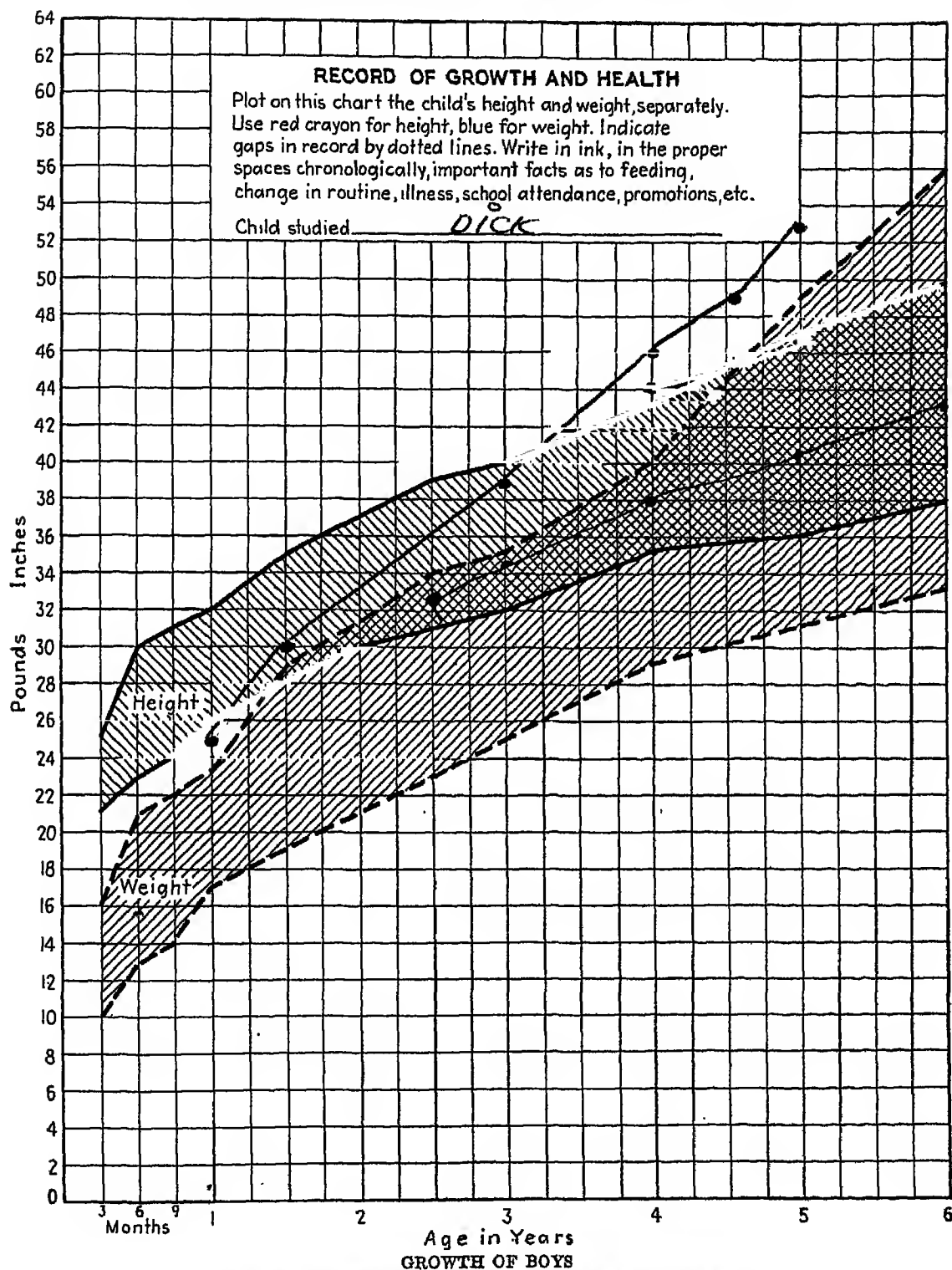
Directions:

A. Read the "Study of Boy in Preschool," pages 84-86.

1. Plot his heights and weights and significant events in his life history on the chart, page 77.
2. Consider the reports of observers, of physician, nurse, parents, teachers, and psychologist; review attendance record as to regularity of attendance and causes of absence. Summarize the material from all these sources on pages 78, 79.
3. What factors in Dick's physical equipment might act as assets or handicaps to his social acceptability or might conceivably enhance or reduce his estimation of his own worth? Indicate the possible significance of his physique in his everyday living.

B. Read the "Study of Boy in Junior and Senior High Schools," pages 87-93.

1. Plot his heights and weights and significant events in his life history on the chart, page 81.
2. Consider the reports of observers, of physician, nurse, parents, and teachers; review attendance and causes of absence. Summarize the material from all these sources on pages 82, 83.
3. What factors in Laurie's physical equipment might act as an asset or a handicap in his vocational adaptation, in his social acceptability, in his estimation of his own worth? Indicate the possible significance of his physique in his everyday living.



ANALYSIS OF HEALTH RECORD

Consider your observations, the reports of other observers, of physicians, nurses, and teachers, review the attendance record as to regularity of attendance and causes of absence. Notice any evidence of improvement following change in regimen or defect correction.

5. Bony structure (head, teeth, limbs, chest)

STOCKY TYPE. HAIR THICK GLOSSY. ALL TEMPORARY
TEETH ERUPTED. TEETH WELL SPACED - NO CARIES.
MUSCLES STRONG, FIRM, WELL-COORDINATED. ARMS-LEGS
LONG IN PROPORTION TO TRUNK LENGTH. HEAD ERECT.
EXPRESSION CONTENTED AND ALERT.

26. Metabolic efficiency (condition of hair, eyes, mucous membranes)

HAIR THICK & GLOSSY, STRAIGHT.
EYES BROWN, LARGE AND CLEAR. NASAL BREATHING
JAW WIDE. LIPS RED. SKIN CLEAR-TANNED.
SUBCUTANEOUS TISSUE PLentiful AND FIRM.

27. Musculature

HANDLES TRICYCLE EASILY. HANDLES HAMMER
WELL. MOVEMENTS SLOW AND STEADY; NO
FIDGETING. RUNS ABOUT WITHOUT SIGN OF
FATIGUE. DELIBERATE IN MANIPULATION OF
MATERIAL.

28. Respiratory tract (nose and throat, chest)

NASAL BREATHING. JAW WIDE

29. Hands and feet

30. Vision

GOOD

31. Hearing

GOOD

32. Heart

GOOD

33. Weight for height, type, and age

5 YEARS * 53 LBS. 46½ IN.
AVERAGE WT. IS 34 LBS AND 38 IN.

34. Reports of diseases and immunizations

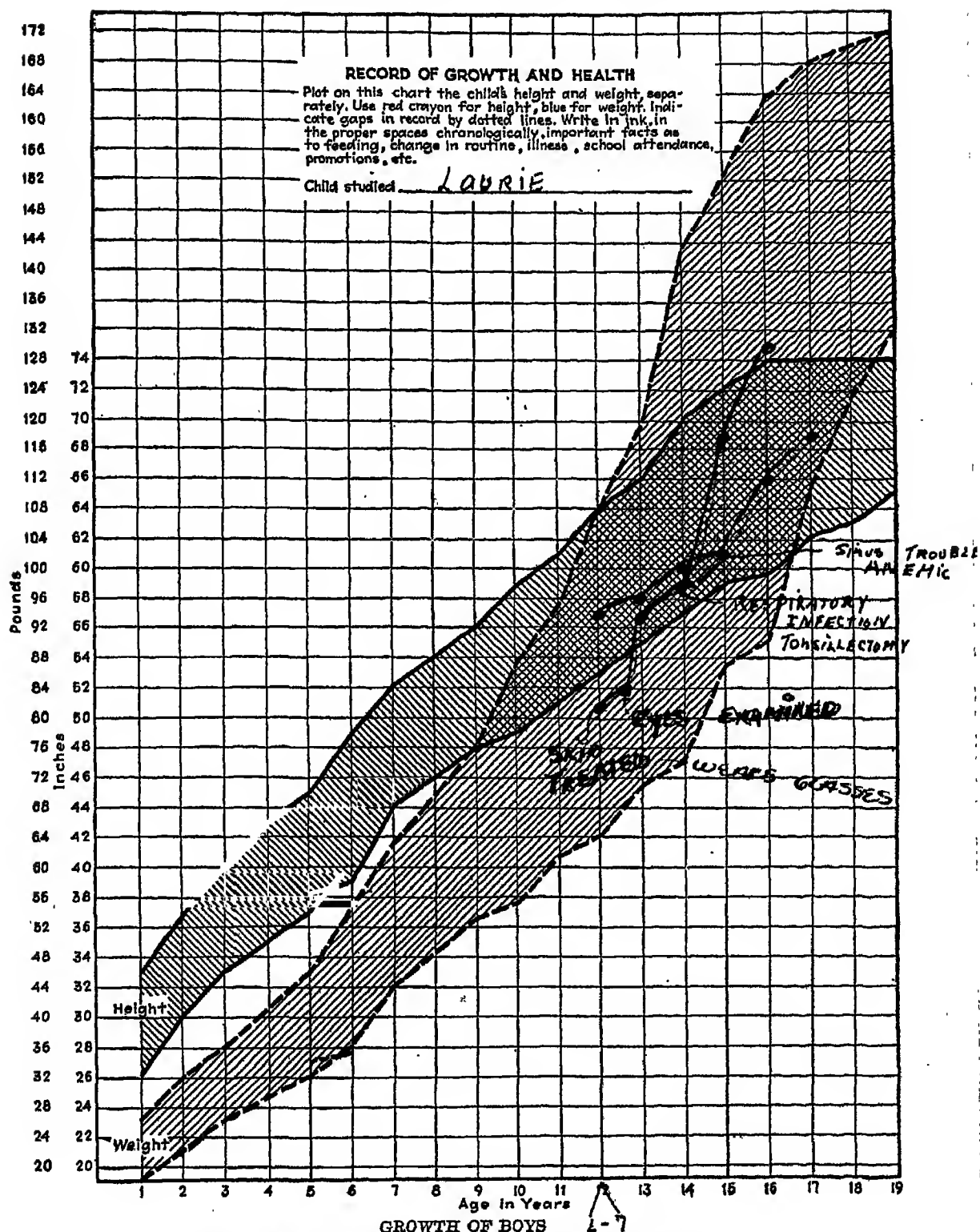
DIPHTHERIA ANTITOXIN AND SMALL POX VACCINATION *
2 OR 3 COLDS IN SECOND YEAR. 14 MO. SLIGHT &
WHOOPING COUGH. 4 YRS. LIGHT CASE OF CHICK
FREQUENT COUGHS.

35. Reports of focal infections

36. Reports of allergies

NONE

37. Reports of endocrine unbalance



ANALYSIS OF HEALTH RECORD

Consider your observations, the reports of other observers, of physicians, nurses, and teachers; review the attendance record as to regularity of attendance and causes of absence. Notice any evidence of improvement following change in regimen or defect correction.

25. Bony structure (head, teeth, limbs, chest)

TEETH CLEAN AND EVEN. - *dental work*
 SLENDER - *ASTHENIC*
 ✓ AWKWARD - POOR POSTURE
 ARMS - LEGS - STRAIGHT
 WRISTS, KNEES - JOINTS NOT ENLARGED.

26. Metabolic efficiency (condition of hair, eyes, mucous membranes)

HAIR THICK AND ^{not too} LUSTROUS. PLENTIFUL -
 EYES CLEAR BRIGHT. DARK CIRCLES.
 MUCOUS MEMBRANES SLIGHTLY PINK.
skin smooth, moist, pale, sallow

1933 - slight eruption on skin

27. Musculature

NOT WELL DEVELOPED.

28. Respiratory tract (nose and throat, chest)

BREATHES THRU NOSE.
many colds

29. Hands and feet

FEET- FLEXIBLE ARCHES. FEET STRAIGHT

30. Vision

^{not good}
GOOD - DID WEAR GLASSES BUT NO MORE.
shades eyes.

31. Hearing

GOOD MK

32. Heart

GOOD MK

33. Weight for height, type, and age

17 - 69 HT - 130 WT

17 - 69 HT SHOULD WEIGH 146.

HE IS - 16 POUNDS UNDERWEIGHT

ht over
wt. - low

34. Reports of diseases and immunizations

SINUS TROUBLE
ANEMIA
COLDS

resp. infect.
indigestion
Stomach ache
headaches

tonsillitis
sore throats
lymph nodes
often sore

35. Reports of focal infections

much dentistry
sore throats

36. Reports of allergies

NONE

37. Reports of endocrine unbalance

—

STUDY OF BOY IN PRESCHOOL

Name: Dick

Date of birth: April 1, 1927

Birthplace: California

Data assembled spring, 1932

Description of Child

General Impression.

Observation and medical examination, January, 1932.

Stocky type. Hair thick and glossy, straight. Eyes brown, large, and clear; nasal breathing; jaw wide, all temporary teeth erupted; teeth well spaced, no caries. Lips red; skin clear and tanned. Subcutaneous tissue plentiful and firm. Muscles strong, firm, well coordinated. Slightly knock-kneed. Arms and legs long in proportion to trunk length. Slight pronation. Straight back. Head erect. Expression contented and alert. Does not smile often. Handles tricycle easily. Handles hammer well. Movements slow and steady; no wiggling. Runs about without sign of fatigue. Physician's comment after examination: "Cooperative, friendly, interested."

Comments of psychologist: "A thoughtful and well-poised young man with a great deal of quiet dignity. Anxious to succeed but not keyed up. Gave uniform attention, effort well sustained. Wanted to know reasons for everything and worked out some for himself. Deliberate in manipulation of material. Worked happily as though each task were one more pleasant duty that life had offered him."

Activity Record, January 28, 1932. ⁴⁻¹⁰

9:18 A.M.: Takes small shovel from barn, left hand, and goes out to sand box, shovels right-handed a few times, leaves shovel, runs to barn, and climbs hastily into auto. Pedals slowly out of barn across yard to little cement pool and runs front wheels into water. Climbs out, pulls auto out, climbs in from left side. Runs into pool again, cries, "Help, Help." Another child tries to pull him out, fails. He gets out, looks at auto for about 30 sec., makes several attempts to pull it out, fails. Other child helps, fails. Seat comes loose. He works it up and down as if trying to get it off. Says, "Hey, look at the seat."

9:23 A.M.: Climbs into auto, places his feet on pedals, then stands up on pedals, cries, "Hey, look." Gets out, wipes nose with left sleeve. Comes to edge of barn and gets tricycle, pushes it over to auto, turns it around, picks up piece of wood with left hand, shifts to right, and tries to

brace seat with it. Picks up another piece with left hand, shifts to right, tries to stick it under seat, fails, shifts it back to left hand. Picks up other piece with right, holds both, looking at them intently. Puts both under seat and tries to see if this has improved seat. Supervisor arrives. Dick: "Hey, if I had a hammer and nails I could fix it." Supervisor: "Perhaps." Both go to barn.

9:30 A.M.: Dick comes from barn carrying hammer in left hand, board in right. Sees nails in board, gets idea, hooks board with nails over axles of auto and tricycle, fails. Takes board off and picks up hammer with right hand, hammers nail. Hooks it on again and yells, "Hey, you kids, help me get this thing out." Two other children help. Push on tricycle, pull auto out, then board slips, and it goes back in. Dick: "Shoot." To attendant, "Hey, I wanna rope." Goes to barn (east end), finds nothing, sees wagon west end with rope tied to tongue, tries to untie, fails, draws wagon out to supervisor, who unties.

9:35 A.M.: Takes rope and goes to pool. Ties one end to back of auto, takes other end around the seat of tricycle and then back to auto, ties on axle. Cries, "Hey, look how I tied, how I tied it on." Supervisor: "Can't you pedal it out now by pedaling?" Dick: "No, wheels slip. See." Gets on from left, pedals, wheel slips. Supervisor: "If you all pull together you can get it out, can't you?" Dick: "Hey, come on." All push or pull. Much shouting. Pull auto out. Dick tries to get rope untied, upsets tricycle, sets tricycle up, pushes auto, dragging tricycle, sets tricycle up, pushes auto dragging tricycle, then gets on tricycle, dragging auto. Comes to box by which I am standing, "Hey, you better get out of the way or your pants'll get dirty."

II. Developmental Progress.

Growth in Size:

Age	Weight	Height
Birth	9 lb. 5 oz.	
6 mo.	15 lb. 8 oz.	
1 yr.	24 lb. 8 oz.	
18 mo.	30 lb.	
3 yr.	39 lb. 2 oz.	
4 yr.	46 lb.	44 in.
4 yr. 7 mo.	51½ lb.	45 in.
5 yr.	53 lb.	46½ in.

Body management. Sat alone at 5 months. Pulled self to feet at 6 months. Stood at 8 months, walked at 12 months.

Organ maturity. Rectal control established at 6 months. Bladder control established for daytime at 12 months, for nighttime at 18 months. May, 1932, one 6-year molar erupted.

Intellectual abilities. Psychometric Tests, September, 1931: C.A., 52 mo.; M.A., 80 mo. Did not go below his C.A. level on any part of test. Reached 96 months level on understanding of spatial relations, on language comprehension, and on language facility. Lowest scores (54 months) on tests of motor skill and form discrimination.

Use of time. December, 1931: Awake about 6:00 or 6:30. Washes and dresses self, somewhat unwillingly. Three meals a day with orange juice in middle of morning. Nursery school in morning. Sometimes some food in middle of afternoon. Rests before lunch and in afternoon. Plays outdoors about 5 hr., mostly with brother or neighbor children. Liked to play with pet puppy until it was killed recently. Likes occupations calling for vigorous activity. Has recently taken more interest in carpentry. Enjoys being read to. Looks at pictures. Has taught self alphabet and to write some letters. Father reads to him between supper and bedtime. Goes willingly to bed at 7:00. Takes teddy bear with him. Undresses self entirely with some urging. Sleeps quietly. Had two naps daily until 14 months, then one nap in afternoon. In fall of 1931 rest in afternoon but nap only every other day. Sunbaths daily since age of 2 weeks.

III. Health Status and History.

Has had orange juice almost from birth. Has always had excellent appetite. Likes milk. Diphtheria antitoxin and smallpox vaccination at 1 year. Had two or three colds in second year; at 14 months a light case of whooping cough; at 4 years, a light case of chicken pox. In November, 1931, in bed 3 weeks with respiratory infection which affected cervical lymph nodes. In spring, 1932, frequent light colds in first 3 months, none later.

Attendance. Entered nursery school fall, 1930. Attended summer play school (6 weeks) in 1931 with no absences. In fall of 1931 absent from nursery school 6 days in October, 12 days in November, because of colds. No other absences.

Family background and home situation

Father: Age 37; race, white; birthplace, Nevada; education, graduate in electrical engineering; occupation, employed in trust department of city bank; affiliations, commercial club, athletic club, university club, country club, college honor societies.

Mother: Age 34; race, white; birthplace, California; education, B.A. and 1 year graduate work leading to high school teaching credential; occupation, housewife, plus some work in cooperative nursery school; affiliations, college women's club.

Maid: Young girl, part time; sleeps at home.

Brother: Born April 26, 1925.

House: In good residential district; telephone; large, level yard well equipped for play. Child has own room.

Community: Is spread out over lowlands and hills. All the families in any one neighborhood tend to have about the same economic status; their children show a characteristic range of intelligence quotients; and most families read the same evening newspaper and go to the same neighborhood movie house. All the newer districts such as this one are "protected" against families of other than Caucasian stock.

School situation

Nursery school in spacious, rambling old dwelling house on a large lot (200 by 200 ft.). Child is member of older group which has as its play place an old carriage house and a portion of the large yard adjoining.

Equipment: Furniture which is child size, including tables and chairs, lockers, and lavatory equipment; piano and various instruments on which children can perform, such as castanets, triangle, cymbals; garden tools and seeds and a garden plot for children's use; a wading pool; a sand box and sand toys; various "pull toys" such as wagons, kiddy cars, toy autos, wheelbarrows; provision for construction by the children in the form of low carpenter's bench and tools, several easels with paints, paper, and brushes, and a low blackboard; an assortment of blocks and large boxes used chiefly in "playing house." In addition, a family of dolls with their beds, chairs, dressers, go-carts, etc. occupy a little room, once old Dobbin's stall, to one side of the main room. A playhouse, large enough to crawl into, is just outside the door. Live rabbits and a duck are

kept on the school grounds and are cared for by the children.

School organization and management. One adult to four or five children. Management unobtrusive but effective. Inspection by nurse in morning. Semiannual examinations by physicians. Orange juice in middle of morning. Rest and lunch at end of morning. Menus carefully planned. Program flexible. Free play most of the time. Some rhythmic games. Field trips.

This nursery school is a cooperative venture of the parents of the children attending. Its purposes are to provide nursery school experience for children and opportunity for parental education for the mothers, who take turns helping. Each mother begins by participating in the physical care of the children. Gradually her ability to carry responsibility for group direction increases, through the guidance of the supervisors with whom she works, the parent-education program, and the library provided for her.

It is the aim of these mothers to learn to rear their young children more scientifically and more joyously; and to furnish for their children an environment which will lay the basis for well-balanced personalities.

Description of group, January, 1932. Age range, 26 to 56 months, average age 42 months. Eight girls, fifteen boys in school. Six boys, two girls in older group. Average height, 40 in.; average weight, 37 lb.; I.Q. range, 98 to 154; average, 119.

Records of group activity. January 20, 1932, 10 A.M. In main building.

10:05: Teacher at piano. Children in boxes and on benches placed to suggest a train. Singing with little rhythm and out of tune. Children jump up and down. Pay no attention to audience. One boy knows all songs and wants to lead.

10:10: Children leave "train" and start marching. Largest boy worried because line not straight.

Two boys march in perfect rhythm. All start skipping. Same two boys perform well. Dramatize "Polly Put the Kettle On." Most of children rather listless. Largest boy tries to get them to act it out better. Teacher only one on tune. Teacher suggests they go outside. Children run for wraps.

In yard.

10:30: Eight children in sand box. Play individual except in case of two boys. Attendant at intervals puts more wraps on children. (Cold wind blowing.)

10:35: One boy goes over and rolls on top of another boy who has been playing quietly. Both topple into sand and continue to roll around in fun. Attendant suggests sand box may be damp. Boys get out immediately, grab small implements, and start digging hole. Attendant says orange juice is ready. All run to carriage house except one girl who has been making sand cakes, quite oblivious of the others.

January 28, 1932. In yard.

9:40: Entire group watching and "helping" instructors dig a new plot of ground. Three boys start climbing into playhouse.

9:45: Digging children discover carrots planted long ago and now good size. Take turns digging one or two each, which the instructors promise to have cooked for them.

9:50: Group scatters, two boys watch duck in pool and pull grass for it. One boy works at carpenter bench. Four or five play in sand box. Several climb a ladder.

9:55: One boy threatens to use wheelbarrow as weapon in attacking boy in sand box, who ignores him completely. Teacher announces it is time for music. Children go to main building singly and in small groups.

STUDY OF BOY IN JUNIOR HIGH AND SENIOR HIGH SCHOOLS

Name: LAURIE

Date of birth: November 11, 1916 Birthplace: California

Schools: Wilson Junior High School

Lincoln Senior High School

Grade: L 12, November, 1933

Records available: September, 1928 to November, 1933

Studies made: Fall, 1930, spring, 1933

General Impression and Health

	Observers' reports, fall, 1930	Observers' reports, spring, 1933
1. Personal attractiveness.....	Well-kept appearance	Pleasing appearance
2. Clothing.....	.....	Neat and well-fitting, tweed trousers, leather jacket, sweater
3. Facial expression.....	"Serious"—"Alert and happy at times, puzzled at intervals, <u>bored a great deal of the time</u> "	" <u>Bored expression most of the time</u> "—"Tries to give impression of indifference"
4. Expressive movements.....	Moves hands about; makes faces	Lazily waves hand as he speaks
5. Voice.....	.....	Fairly deep; well-modulated
6. Bodily repose.....	"Restless, moving about continuously"—"Free from constant unnecessary activity"	"Seems marked. <u>Frequent slow movements</u> "—"Good relaxation." Chews gum continuously
7. Endurance.....	.....	Little activity recorded
8. Size and build.....	Slender	Asthenic
9. Posture and gait.....	<u>Awkward; posture poor</u>	Movement slow, economical; posture poor
25. Teeth.....	Clean and even	Clean and even
25. Arms and legs.....	Straight	Straight
25. Wrists, knees.....	Joints not enlarged	Seemed "bony"
26. Hair.....	Thick and lustrous	Plentiful; not particularly lustrous
26. Eyes.....	Clear and bright; <u>dark circles</u> ; wears glasses sometimes	Clear and bright; shades eyes with hands quite frequently; does not wear glasses
26. Skin, mucous membranes, subcutaneous tissue	Soft, smooth, moist; pale and, <u>sallow</u> ; mucous membranes slightly pink; subcutaneous tissue not plentiful	Pale, smooth, and moist; slight eruption; mucous membranes pink; subcutaneous tissue firm; very slight amount
27. Musculature.....	Not well developed	Not well developed
28. Nose.....	Breathes through nose	Breathes through nose
29. Feet.....	Flexible arches; feet straight	Walks with feet parallel; rear seam of shoe seems straight

Observation: School Environment

November, 1933: English class. Thermometer reading 73°. Slight air movement. Modern adjustable windows. Sufficient light on sunny days. Two unshaded globes furnish light on dark days. Ordinary classroom equipment. Ample space for small class.

Science class. Light from windows on right. Tablet arm chairs in front of room, laboratory desks in rear. Microscopes, specimens, chemicals in cases. Mounted skeleton in front of room. Plants and aquaria on side tables. Storeroom and office in rear. An active, noisy class in physical education just outside the windows.

Home Background

Family background: Lives with both parents. Parents native-born. Father has collegiate and professional training; holds reasonably secure professional position. Mother homemaker, well educated. Home in pleasant district of city.

Telephone. Two brothers, 14 and 15. Works around home. Is not paid wages. Apparently has ample spending money.

On pupil questionnaire, August, 1933, child reports:

Family group "plays games, talks, listens to radio, and squabbles."

Family has in home "12 magazines and 2 daily papers."

After school he "sleeps, fusses around, does errands (exclusively by automobile), or does anything that comes up."

After dinner he "listens to radio, visits with friends, studies, goes to movies, fusses around, visits the soda fountain."

One of chief desires is "the right and money to fix my room as I wish."

Is scolded most for "not doing home work, getting punk marks, arguing."

Is most afraid of "failure."

Has had as pets "dogs, kittens, monkeys."

Activity Record

Child: LAURIE
Time: 12:50 to 1:10

Lincoln Senior High School
Class: English H 12

November, 1933
Boys: 6; Girls: 14

Begins at 12:50: Teacher says, "Laurie, please collect the papers." Laurie gets up. No expression of either willingness or unwillingness. Walks slowly around the room collecting papers. Reads some of them. Makes a face of disgust at one. Walks slowly to desk and stops in front of class, reading papers. Lays down the papers, neatly stacked, on teacher's desk. Walks back to seat slowly and sits down, leaning against the seat next to him. Looks out of window. Looks back at teacher. Opens notebook. Takes out pen from pocket. Opens it. Draws in notebook with pen held in right hand. Closes notebook. Writes on chair. Seems to ignore class discussion going on. Slumps farther down in seat. Laughs when class questions teacher. Slumps farther down into seat. Straightens up. Chews on pen. Reaches over and picks up paper from floor. Glances at it. Drops it. Looks out of window. Laughs. Supervising teacher comes in. Laurie turns around. Sits up—takes out wallet. Opens it. Takes out yellow slip. Walks up to supervising teacher and gives her the slip, smiling. Walks back to seat. Sits down again. Slumps down in chair. Shades his eyes. Teacher says, "Open your books to

Shelley's poem, The Cloud." General confusion in classroom. Laurie moves over to look on the book of another boy. Boy says something, both laugh. Teacher begins to read the poem. Asks various pupils to explain the lines. Laurie looks at book, shading his eyes with his right hand. Is slumped down in his seat so that his elbow is on the arm of the chair. Does not move. Teacher continues to read and ask various students to explain. Student makes witty remark. Laurie laughs with others. Laurie looks up from book, mouth slightly open. Glances out of window. Teacher says, "Laurie, you continue the reading." Laurie nudges boy next to him, who indicates place. Laurie slowly sits up in his seat, picks up the book, and reads with a fairly deep, well-pitched voice. Reads very well with much understanding and very little emphasis on rhythm. Stumbles over word. Smiles confidently as he finishes poem. Teacher nods his approval. Laurie smiles, slumps down in his seat, holding his head in his right hand.

Comments of Observers:

November, 1930: "Posture abominable."

October, 1931: "Friendly enough with classmates but appeared not to take the initiative in starting a conversation. Was respectful to teacher." . . . "Shows interest only when allowed to talk."

November, 1933: "Very thin and long-legged, with no pep and little life; his voice newly changed, his speech lazy. His chief object in life just now seems to be rest, and to accomplish this he lies down as much as is possible in his chair. He is clean and dressed comfortably, but does not seem conscious of his clothing or of anything else, except, 'How long will it be before I can go to bed?' and 'How can I best spend the interim in resting?'" . . . "Bodily repose is good, almost too good; that is, he relaxes so much as to interfere with effi-

cient participation in classroom." . . . "Extremely argumentative." . . . "Laurie has just come into the classroom, talking easily to boys of his own age with him. Seemed to lead the conversation; others were laughing at his jokes. Was quite active, moving about until class began. Speech and actions lazy and slow; used the typical expressive movements of his age—a very, very lazy waving of the hand. Animation soon faded; he sank way down in his chair, draped hand on chair next to him, leaned against the back of his own chair, and just stared straight ahead." . . . "Laurie attacked test (science class) confidently. Maximum attention span about 10 min."

Record in Wilson Junior High School and

Attendance record						Health record
Date	Grade	Days absent	Cause	Height	Weight	Notes, physical examination
Fall, 1928	L 7			57	82	Medical inspection: all items rated satisfactorily except skin, rated as needing attention. Skin being treated. Wears glasses. Dark circles under eyes. Reexamination requested
Spring, 1929	H 7			58	84	Conference with school physician January, 1929; skin satisfactory; both eyes less than 20/20; has not had eyes examined since 1923. To have eyes examined and return for conference
Fall, 1929	L 8	1	Cold			
Spring, 1930	H 8	2	Sore throat, stomach ache	60	94	
Fall, 1930	L 9	16	Respiratory infection, sore throat, cold, tonsillectomy			Conference with school physician November, 1930, upon return from absence due to acute respiratory infection. Reports his private physician recommends removal of remnants of tonsils; will have this done during Christmas holidays. Advised rest before dinner. Assigned to convalescent room for one period daily. To return for conference in January. Conference Dec. 2, 1930, after removal of tonsil under local anaesthetic. Enlarged cervical lymph node. Very pale. Advised to stay home for few days. Conference December 5, 1930: Lymph nodes smaller, not tender. To remain in convalescent room one period daily
Spring, 1931	H 9	1 1 period	Stomach ache; dentist appointment	61	97	Conference January, 1931: feels better; throat still somewhat sore. Is under care of family physician. Assigned to convalescent room two periods daily. Conference February, 1931; has had 12 injections of iron. Has sinus trouble. Color still not good. To return to limited physical education; to leave convalescent room
Fall, 1931	L 10	5½ 4 periods	Cold; to dentist			Conference October, 1931, after absence of 5 days. Has had general examination by family physician. Found to be anemic. Iron injections repeated. Assigned to convalescent room. November, 1931: throat still inflamed, lymph nodes tender. Discharged from convalescent room

Lincoln Senior High School

Records of psychometric and achievement tests

Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
Stanford Binet	12-0	13-8			
					Interests: Boy Scouts
Terman group test	12-11	16-11			
					English C Art C Mathematics C Music B History B Shop C Science B Physical Education C Latin C
					English B Algebra B Science B Latin B Physical Education C
					English A Science B Latin C Algebra B Physical Education B February, 1931: Incomplete in Latin. Comment: "Has ability but showed absolutely no knowledge in examinations. Recitations are nil. Attitude that of utter laziness. He thinks he works, but really he doesn't know the meaning of the word."
					English A Geometry C History B Latin C R.O.T.C. B

Attendance record						Health record
Date	Grade	Days absent	Cause	Height	Weight	Notes, physical examination
Spring, 1932	H 10	6 1 period 8 periods	Indigestion, cold, poison oak; to den- tist; to orthodontist			
Fall, 1932	L 11	8 2 periods	Cough, influenza, stomach ache; to dentist	66	118	
Spring, 1933	H 11	13	Cold, sinusitis, sore throat			Conference March 10, 1933: Absent every other day last week and two days this week because of sore throat and sinusitis. Hemoglobin has come up. Throat still in- flamed. Heart and lungs satisfac- tory. To remain in convalescent room. Conference March 17: Throat improved. Heart and lungs satisfactory. Discharge from Convalescent Room. Return to R.O.T.C
Fall, 1933	L 12 3	1 period	Headache, respira- tory infection	69	130	Conference November 14, 1933: Respiratory infection, temperature 99°; excluded from school

High School

Records of psychometric and achievement tests

Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
					English A Geometry B History A French B R.O.T.C. B
					English C History A/B Chemistry B French C R.O.T.C. A Vocational interest: political Activities: French Club
					English B History B Chemistry C French D R.O.T.C. B Vocational interest: municipal government official Activities: tennis, swimming
					Vocational interest: government official or powerful business man. Plans to attend university. Hobbies: collecting menus, programs, match boxes Reading: <i>Bridge of San Luis Rey</i> <i>20,000 Years in Sing Sing</i> <i>The Three Musketeers</i> Plays bridge, ping-pong, parchesi Movies twice weekly

Exercise 5. What can we learn from psychometric records and school history?

Purpose: To describe and appraise a child's abilities and attitude toward intellectual activities, as indicated by psychometric records and school history.

Directions:

A. Read the "Study of Boy in Secondary School," pages 94-96. Try to gain as much insight as you can into Sam's endowment and his use of his abilities. Answer the following questions:

1. What evidence is given by Sam's intelligence quotient as to his developmental progress?
2. Is he retarded, normal, or accelerated in school progress?
3. Is his achievement as shown by marks, teachers' comments, and observers' reports what might be expected of him?
4. Does he show continuity of purpose and effort? Is he self-confident in his attack on school tasks?

5. To what extent has the school provided opportunities adjusted to Sam's abilities?

B. Read the "Study of Girl in Secondary School," pages 97-101. Try to gain as much insight as possible with respect to Josie's endowment and her use of her abilities. Answer the following questions:

1. What evidence is given by Josie's intelligence quotient as to her developmental progress?
2. Is she retarded, normal, or accelerated in school progress?
3. Is her achievement as shown by marks, scores on achievement tests, teachers' comments, and observers' reports what might be expected of her?
4. Does she show continuity of purpose and effort? Is she self-confident in her attack on school tasks?
5. To what extent has the school provided opportunities adjusted to Josie's abilities?

STUDY OF BOY IN SECONDARY SCHOOL

Name: SAM

Date of birth: May 5, 1910 Birthplace: California

School: Lincoln Senior High School

Grade: H 12

Description of individual: Sam is a Negro boy. He has a slender, well-built, evenly proportioned body, hair black and woolly, eyes bright and clear, squints occasionally when troubled or in doubt about something. His forehead is very much wrinkled. His teeth are a sharp contrast to his dark brown skin. They appear much whiter and glossier than do the teeth of the white boys around him. His skin is free from pimples and scars, and a slight beard is noticeable. He appears to have good muscular development and coordination. His chest is broad, shoulders rounded a trifle. His posture becomes especially rounded when he is seated as he leans over his work. He has a happy expression.

Sam's Activity Record

Class: Harmony **Time:** 1:00 to 1:20 P.M.
Date: November 6, 1929

Description: Class is composed of 11 pupils: 4 boys and 7 girls. The thermometer reading is 70, and there is an odor of furnace in the room.

First five minutes: As Sam comes into the room he is talking to some companions, saying, "I don't

savvy." He takes his chair in the second row and immediately gets out his music notebook. The teacher has written some chords on the blackboard, and Sam is comparing them with his work. The teacher directs her first question to him: "What do we start with?" Before Sam answers, she answers the question herself; "Here is the tonic triad and the dominant seventh." Sam scratches his chin with his left hand, then puts his little finger into his mouth and chews on it. Later he takes it out and scratches his forehead again; then he rests his head on his chin. With his right hand he is taking down the chords in his notebook. As the teacher speaks to another boy, Sam starts speaking to her, but his words are indistinguishable. Sam leans over on his companion's chair and looks at his work in a comparative manner. They talk about the various chords, then notice what is going on at the blackboard. Sam puts his pencil in his mouth and sucks on it for a while. When the instructor asks questions of the other students, Sam mumbles the answers to himself, sometimes very plainly and sometimes in a whispering tone.

He does not sit with his back against the chair but leans over his paper, shoulders bent and forehead wrinkled. Every time he raises his eyes to the blackboard he frowns. The teacher complains that the class do not know their lesson. Sam says: "Well, gee, how can we when we don't understand?" The teacher explains the chords and their resolution. Sam interrupts her by saying: "Well, look, why is this wrong?" Teacher: "How many steps in a minor third?" This is evidently food for thought, and Sam seems to be enlightened. He looks at his work again and blows his nose, raises his right hand as if to ask a question.

Second five minutes: Sam has resurrected a straw from somewhere and is chewing on it. He raises his right hand again and says, "Well, listen, I don't see that." The teacher explains to him. While she is doing so another boy and girl are making so much noise that it is impossible for Sam to hear. Sam, "Aw, I didn't hear what you were saying. Cut it out, Bill." Sam to teacher, "Well, listen, is it a major third or a minor third?" The teacher starts to explain, but the others whisper again. Sam, "Aw, gee, kids, stop talking." Teacher, "Sam, listen, are you sure that you see that?" Sam does not answer; instead, he smiles at another boy and continues to suck on the straw; sometimes he takes it out and twists it between his fingers. Then he says, "Well, listen, why don't you sharp that note? (Then to the boy sitting next to him who is making a noise.) That's why you don't know nothing. Why don't you listen?" Teacher, "What is the relative major?" Sam sits back and smiles when the other boy is called upon to answer. Sam: "I want to know why it is *F* sharp." Teacher: "Sam, you put it on the board." Sam goes to the board and begins to write the chords on it.

Third five minutes: A student goes to the piano and plays what Sam has written on the board. Sam says, "Oh, I can do that too. I can figure it out when I play it on the piano." He turns to the class and grins at them. The teacher explains the matter to Sam again, and he turns to go to his seat, saying, "When I get home I'll forget all about it." As he goes to his seat he taps each chair as he passes with his pencil, using his right hand. As he sits at his place he pounds rather lightly on his chair with his two hands, then hums a few notes, writes

in his notebook, then whistles to himself. He uses his right hand when he writes. The teacher is writing on the board. He looks at her, scratches his head, using his left hand, and holds his pencil in his right. The teacher gives them a new rule, explaining it by writing some chords on the board. Sam says, "Wait a minute, till I get this off my mind. Wait. Wait. I'm talking about that last chord." Then to the boy who is sitting beside him talking, "You're going to get an *F*." More explanations from the teacher. Sam takes down the instructions in his notebook. He hums to himself. The class in the next room is singing a familiar song, and Sam joins them by humming the tune. While doing this he is bent over his desk writing the notes.

Fourth five minutes: The teacher gives another rule which Sam writes down in his book. He uses his right hand and keeps the paper in place with his left. When the teacher has finished dictating the rule Sam says, "Say, listen, can I ask you another question? Is it always a minor seventh?" The teacher explains. The class hour is almost up, and a boy goes to the front of the room to talk to the teacher. Sam looks at him and says, "Say, listen, I'm going to see that teacher." He goes up to the piano and leans against it, waiting to speak to her when the boy is through. When he has the chance he opens his book and points to various notes with his pencil. He remains after the dismissal bell.

Mathematics classroom, 12 boys and 8 girls present. November 6, 1929.

First five minutes: Sam is sitting still and looking over his paper. He places his left hand on the other desk. The teacher reads the announcements for the period. He has his legs stretched out at about a 45-deg. angle. He scans his paper, and the others talk among themselves. The teacher begins to pass test papers, and Sam places his notes in his binder and takes his binder and books and forms a neat pile of them on the floor. He takes the examination paper with his right hand. He waits for the teacher to give the order, "Write." At the signal he turns his paper over and starts writing with a lead pencil held in his right hand. His left hand lies over the end of the test paper. He constantly looks at his test paper.

Sam's Growth and Health Record

Date	Age	Grade	Height	Weight	Health report
1927	17	H 10	64	117	Posture poor. Fallen arches. Nose slightly obstructed. Teeth irregular; a few cavities; need cleaning
1928	18	H 11	64	125	Feet still in poor shape. Teeth irregular; many cavities; need cleaning

Sam's Psychometric Test Records

Terman Group Test C.A.: 18 years 3 months M.A.: 17 years 5 months

Sam's School History, Marks, Comments

Subject	June, 1927 L 10 mark	December, 1927 H 10 mark	June, 1928 L 11 mark	December, 1928 H 11 mark	June, 1929 L 12 mark
English.....	B	C	Drop	C	Drama.....B
Algebra.....	A	Drop	C		
History.....	C	Drop	F	C	
Printing.....	B	B	B	B	B
Choral.....	B	C	Glee.....A	A	A
Physical education...	B	B	C	B	C
Physiology.....					C

Comments by Teachers: (Causes of low mid-semester grades)

April 15, 1927: English—displays no initiative or effort, has made no contributions, written or oral.

September 14, 1927: Choral—absent for one week.

October 17, 1927: Algebra—low grades because of overwork on the outside.

March 12, 1928: English—unable to hand in work on time. Too little time for preparation of written work. About one-third of assigned homework has been handed in.

March 19, 1928: English: Does not prepare his assigned homework.

April 30, 1928: Algebra: Unsatisfactory work. Doesn't seem to be interested in graphs. Daily work poor. Says has no time for help.

September 12, 1928: Dramatics: Seems unable to read play and analyze it.

September 14, 1928: History: Failed to make up examination missed when absent.

September 15, 1928: History: Incomplete work.

February 15, 1929: Dramatics: Unprepared for class recitations.

April 15, 1929: Physiology: Poor daily work. Goes to sleep in class. Admits that he has not worked. Worried over failing because he is afraid that it will affect his eligibility to play football.

Interests: Football; unusually successful in comic parts in dramatics; sings in church choir; has spent one summer working in dining car on transcontinental line.

Sam's Home Background

Lives with father and mother. Father a railroad employee. No siblings.

School Background

Lincoln Senior High School: A modern city high school located in district of small homes. About 1,500 students, most of them planning to continue their studies after high school, in college or some other institution. Wide range of I.Q.'s., with the mean at 107 or 108. Because of interests of students most courses are college preparatory.

Only prevocational courses are in commercial subjects. Art, printing, carpentry, music, and a variety of other such courses are offered, the stress being on their contributions to a liberal education. Management is democratic and informal. Great administrative flexibility permits adaptation to individual needs and interests. A fairly good health program. The majority of the students have parents who were born in this country. They are predominantly of north European stock. There are about a dozen Negroes in the school. about the same number of Orientals. Little race prejudice can be detected.

STUDY OF GIRL IN SECONDARY SCHOOL

Name: Josie

Date of birth: April 29, 1923

Birthplace: California

School: Wilson Junior High School and
Lincoln Senior High School

Grade: L 11 in January, 1938

Records collected: September, 1936,
January, 1937, January, 1938

General Impression and Health

	Observers' reports, March, 1934 10-11	Observers' reports, March, 1937 2-11
1. Personal attractiveness.....	Pink cheeks, alert	Healthy, alert
2. Clothing.....	Well fitted, clean, neat, attractive	Clean, in current fashion
3. Facial expression.....	Quiet, composed, but alert	Happy, alert, unresponsive
4. Expressive movements.....	Smiles much when going before class	Smiles and giggles frequently
5. Voice.....	Soft, clear, singing voice not loud, pleasant	Pleasant, low, and husky
6. Bodily repose.....	Very relaxed, very little fidgeting, moves fast in time to music	Bites fingernails; scratches head and runs fingers through hair
7. Endurance.....	Seems to have much reserve energy	Indulges in ordinary activity without undue fatigue
8. Size and build.....	Tall, pyknic, medium frame	Tall, slender
9. Posture and gait.....	Relaxed, effortless movements, coordination without obvious effort	Slumps when walking. Manner is a little awkward
10. Manipulative skill.....	Handles books gracefully; right hand preferred	Skillful; graceful movements
11. Communication.....	Maintains a calm unmoved expression; few gestures	Smiles and laughs a good deal
25. Head.....	Round, neck small	Well formed
25. Teeth.....	Even, well spaced, white	Large, slightly irregular. Several fillings, clean
25. Arms, legs.....	In proportion to trunk	Straight
25. Wrists, knees, ankles.....	In proportion to size of legs and arms. Small in size, no pronation	Not enlarged
26. Hair.....	Streaked light and dark brown, straight, mussed, shiny	Plentiful, lustrous, permanent wave
26. Eyes.....	Bright	Bright, squints (wears glasses)
26. Skin and subcutaneous tissue.....	Tanned, a few freckles. Cheeks pink, free of blotches. Plentiful subcutaneous tissue on arms and legs	Smooth. Seemed dry. Lips pink. Average subcutaneous tissue, much on arms
28. Nose.....	Small, no wheezing sound as from congestion	Unobstructed
27. Musculature.....	Even, smooth, well distributed	Evenly developed
29. Hands.....	Fingernails short, clean; fingers more square than tapering. In proportion to size of arm	Nail bitten
29. Feet.....	Small, high arches. Well fitted with shoes	High arches
30. Vision.....	No glasses; no squinting. Holds book almost a foot away	Wears glasses for school work

ACTIVITIES OF CHILD IN GROUP

Place: Wilson Junior High School Time: 8:10 to 9:10 Date: March 14, 1934
 Adults in Group: Male, 2; female, 2; ages approximate 22 to 45 years
 Children in group: Male, 20; female, 20; ages approximate 11 to 13 years
 Class: Music

First five minutes: Teacher says, "Arms forward." Josie stretches arms out front limply and slowly. Sits erect. Opens book at command, sings with group but not loudly. Sings alto quite accurately. Looks out window; laughs at tenor's antics. Sits quietly, looking at music book. Turns pages with right hand. Her movements are deliberate, since there is no need of hurrying. Both hands are used to prop the book on the desk so that it will be in a convenient position for singing. She slumps a little into the seat and crosses her legs.

Second five minutes: Still looking at book, she does not sing unless everyone is told to. She waves hand to rhythm, when teacher asks, and sings. She changes book. She sits quietly and does not speak to her neighbors, who are girls. When the teacher is busy with another part of the class she glances out the window as though her mind were wandering.

Third five minutes: Looks out window and sings also from memory. Sits erect. Book flattens out on desk, lack of interest in the singing. She hears the page number and name of books when teacher gives them. One book on the seat beside her has an artistic label of her own design. She crosses her knees and wags one leg to rhythm, forward and backward.

Fourth five minutes: Volunteers by raising her hand to sing with group before class. Teacher lets her sing. She smiles broadly and slowly walks to the front, brushing no one on the way. She takes her place with the others and stands erect, singing her part. At first she seems a little embarrassed but orients herself quickly. When finished, she returns to her seat quietly. Her shoulders are slightly rounded.

Place: Lincoln High School Time: 10:00 to 10:15 Date: March 18, 1937

Adults in Group: Male, 0; female, 1; ages approximate 24 years

Children in group: Males, 12; females, 14; ages approximate 14 years

Class: Personal Management.

Room small, lined with bookcases and blackboards. Light reflects from desk tops, causing glare.

First five minutes: Josie was sitting at her desk biting her nails and leaning her head on her hand. The teacher was explaining about the recreational reading room, and Josie sighed every minute and seemed very much bored. There was an essay to be written on material to be found in the reading room, and a girl wanted to know when the essay was to be handed in. Josie leaned on her hand and assumed a very much interested attitude. She then looked out of the window several times, and when there was a question as to whether the whole class or just part of the class would go to the reading room, she whispered to two boys, asking them to let her stay. They refused, and she said, "Oh darn you, why didn't you choose me?" There was quite a lot of giggling on her part, and then the class was directed to go downstairs.

Second five minutes: On the way to the recreation room she paired off with another girl, and they walked arm in arm down the stairs. She slumped quite a bit when she walked and took long loping steps. She said to her friend, "I wonder what that girl is coming for?" She stopped at a fountain and got a drink and then entered the reading room. She was undecided where to sit and looked around the room and finally decided on a place at the table. She sat down and ran her finger through her hair and scratched her hair and head. She then laid her head on the table, smiled at her friend, and then looked around the room. She giggled and whispered a good deal. All this time she was chewing gum very vehemently.

Third five minutes: She started to bite her fingernails again and ran her hand through her hair. She arose and went over to the bookcase along the walls and whispered and giggled to her friends. Walked along the walls, looking aimlessly at the books. She didn't seem very intent on her work. She wrote something on her paper, leaning against the wall. She squirmed and fidgeted and stood on one foot.

Josie's Growth and Health Record

Entered	Grade	Days absent	Cause	Height	Weight	Health record; physical examination
August, 1927	Kg.	35				
January, 1928	Kg.	8	.....	46	50	No immunization for smallpox
August, 1928	Kg.	14				
January, 1929	L 1	0				
August, 1929	H 1	18				
January, 1930	L 2	0				
August, 1930	*L 3	12				
January, 1931	H 3	11	.....	55	71	Measles
August, 1931	L 4	3	.....	55	73	
January, 1932	H 4	0	.....	57	77	Having dental work done. Urged to take foot exercises
August, 1932	L 5	3	.....	.....	...	Smallpox immunization
January, 1933	*L 6	5	.....	59	86	Injury to right arm from fall; advised to go to family doctor if not improved
August, 1933	H 6	3	.....	61	93	
Wilson Junior High School						
January, 1934	L 7	7	Colds	63	97	Colds have been frequent only during last 6 months. Mother will take to family doctor for tonic. Mother questions vision. Nurse to check
September, 1934	H 7	9	Colds, upset stomach	65	104	
January, 1935	L 8	2	Cold, infected ankle	66	108	Menstruation established. Vision, left 20/70, right 20/30. Nutrition very defective
August, 1935	H 8	4	Cold, sore throat	69	120	
Lincoln Senior High School						
January, 1937	L 10	1	Cold	69½	125	Doctor recommends that Josie have seat in left front side of room because vision is poor, even with glasses. Note sent home and to teachers concerning eyes. Has had present lenses 1½ years
May 7, 1937				69½	127	
August, 1937	H 10	2	Sore throat and cold, skin infection, boil on cheek			

Josie's Record : Intelligence Tests

Grade	Test	C.A.	M.A.
L 1	Detroit Primary	5-10	7-4
L 3	Kuhlman-Anderson	7-6	9-5
H 6	Kuhlman-Anderson	10-7	12-9
H 9	Terman B	13-7	14-5

Josie's Record : Achievement Tests

Grade	Test	C.A.	Standard reached
H 1	Reading Comprehension	7-6	8 years 6 months, grade 3
H 3	Stanford Reading	8-1	9 years 11 months
H 6	Stanford Reading	10-7	13 years 1 month
H 9	New Stanford Reading	13-7	16 years

STUDYING CHILDREN IN SCHOOL

Josie's School History

Pershing Elementary School

Entered	Grade	Marks	Conduct	Entered	Grade	Marks	Conduct
August, 1927	Kg.			January, 1931	H 3	A	B--
January, 1929	L 1	B	B	August, 1931	L 4	B	A
August, 1929	H 1	B	B	January, 1932	H 4	A	A
January, 1930	L 2	A	B	August, 1932	L 5	A	A
August, 1930	L 3	A	A	January, 1933	L 6	A	A
				August, 1933	H 6	A	A

Wilson Junior High School

Entered	Grade	Marks	Entered	Grade	Marks
January, 1934	L 7	A English B Mathematics B Social Studies A Foods B Physical Education A Music	August, 1935	H 8	B English A Social Studies A Foreign Language A Drawing B Science A Physical Education
September, 1934	H 7	A English B Mathematics A Industrial Art A Drawing B Science A Glee A Physical Education	January, 1936	L 9	A English C General Mathematics B French C A Drawing A Physical Education
January, 1935	L 8	A English B Social Studies A Foreign Language A Drawing B Science B Physical Education	August, 1936	H 9	B English B Mathematics B French A Art A Physical Education

Lincoln High School

January, 1937	L 10	A Personal Management A French A Algebra B Art S Physical Education	August, 1937	H 10	A Social Living A Voice A Algebra C French B Art S Physical Education
January, 1938	L 11	Art Geometry Chemistry American History Physical Education	At the beginning of L 11 semester asked for two changes of program a week apart. Reasons: "Had to have certain teachers." "Couldn't get along with the teacher or the course"		

Excerpts of Letters Written by Josie in English Class

February, 1935: "Jane, my best girl friend, and I grew up together though she is about 2 years older than myself. It was very convenient for my sister and I because Jane has an older sister just my sister's age. But when my brother arrived, it wasn't so good. Well, ever since we were able to talk we thought we were cousins, because we were told to call each others mothers and fathers Aunt and Uncle, but it wasn't until a few years ago we found out we weren't really cousins. You should have seen us, we were crying real tears for, well I guess we thought we should have been cousins.

I like dogs real well and every strange dog that comes around I give it something to eat or pet it and bring it in the house. When I was smaller I always used to be frightened of dogs so my mother bought a dog for me so I wouldn't be so frightened and scream every time I saw a dog.

I have enjoyed my school life at Wilson very well and have tried to get good reports. I have been on the Honor Roll every report since entering the low seventh grade."

January, 1936: "Ten girls, all of whom are in this room, including myself, have organized a club. It is called the M.T. club. The meaning of which we do not tell anyone, as it is a secret. In this club we have meetings and parties, one of each every month. Each girl has her own month to be chairman and she is responsible for the meeting and the party.

I enjoy any movie that isn't too complicated. I have more than one favorite radio program. They are, Hollywood Hotel, and One Man's Family. My favorite magazine is Vogue, as I am interested in art and drawing of fashions.

I play the piano a little and I think I will take lessons in popular music. I like to draw very much, especially to design and draw fashions. . . . "

Josie's Home and School Background

Family background: Lives with both parents. Parents born in United States. English spoken in home. Father an office worker in railroad company. Mother homemaker; an officer in the P.T.A.; worked in school on P.T.A. library project. Home in residential district. Family has telephone, piano, automobile. One brother 3 years younger, one sister 5 years older. Counselor reports parents as interested in their children. One newspaper and three magazines reported in home. Vacation camping trips with family.

Interests: In junior high school, belonged to Glee Club, Special Arts Class, Student Council. In senior high school, belongs to Girls' League, and in H 10 class was on publicity committee. Sings in a trio at school. Outside school has belonged for last 2 years to a girls' social club. In L 10 reports swimming and tennis as outside activities; in H 10, riding and skating. Belongs to no church organization, does not go regularly to movies. Has regular home duties, cleaning, washing dishes, caring for own room, helping with meals. In L 10 reports 8 to 10 hours a week devoted to these duties, in H 10, 3 hours weekly. Has allowance in L 10 of "about \$1.50 a week," spent for "lunches," "shows." In L 10 names three "closest" friends in school, all girls; in H 10 names ten "closest" friends, including three boys.

Future plans: L 10—to go to the university and study dress designing. H 10—to go to the University, be a "dress designer, clothes model." "Trio singing" also included in answer to question, "For what occupation are you planning?"

See description of Wilson Junior High School and of Lincoln Senior High School, pages 163-176.

Exercise 6. What can we learn from study of family stock?

Purpose: To gain some conception of the difficulties involved in collecting data for the study of human heredity; to learn to use the conventional forms for presenting data on inheritance.

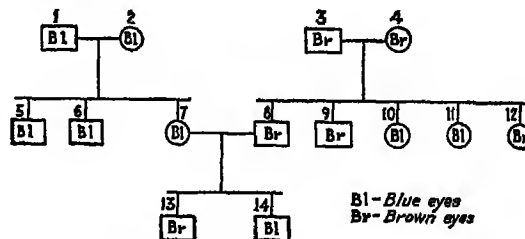
Directions:

Collect data on the occurrence of a trait chosen from the list below, in your own family or in another family well known to you. At least four generations should be represented; include as complete a report as possible on more distant relatives, such as first and second cousins.

Traits: eye color, hair color, curly or straight hair, extra finger or toe, webbed fingers or toes, crooked fingers, left-handedness, twinning, stature, build, hemophilia, color blindness, night blindness, white forelock, diabetes, outstanding musical ability or outstanding lack of musical ability, as indicated by "tone deafness."

Assemble your data on a chart. The diagram below gives a general pattern for this chart. Your own chart will represent more generations and more individuals than this illustration.

Squares represent males; circles represent females. A horizontal line connecting a square and a circle represents a marriage. Squares and circles dependent from a horizontal line represent children of one marriage.



The foregoing chart may be interpreted as follows: Two blue-eyed persons (1 and 2) marry. Three children are born of the marriage, two boys (5 and 6) and one girl (7), all with blue eyes. The blue-eyed girl (7) marries a brown-eyed man (8) whose father and mother (3 and 4) are both brown-eyed, who has one brown-eyed brother (9), one brown-eyed sister (12), and two blue-eyed sisters (10 and 11). Two boys are born of this marriage, one brown-eyed (13), one blue-eyed (14).

Exercise 7. What estimation of the influence of his home on a child can be made by study of school records?

Directions:

A. Review the "Study of Boy in Preschool," pages 84-86.

1. What can you learn as to the parents? How old are they, where and of what stock were they born, how were they educated, and what are their occupations? What are their religious and social affiliations? Are they more wealthy and secure than most of the families in the community? Or are they less certain of a good living? Of any living at all?

In the descriptions of the child's daily life you will find some information concerning the neighborhood where Dick lives and plays and *makes his earliest friendships outside his own family circle*. You may find hints as to the parents' attitudes toward each other, toward their children, their common home.

What about the household? Who live under this roof? How is Dick's life different from what it might be, were he and his parents sole members of the group?

What indications can you find as to Dick's parents' concern for him? What guidance are they giving him? What is the prospect of intelligent cooperation between his home and his school?

2. On the basis of the criteria suggested by the White House Conference, page 20, review the information you have collected as to Dick's family background. Write your answer to the questions:

What contributions are being made to this child's welfare by his home? What additional contributions might be made?

Are there any conditions in his home which may be detrimental to his development?

B. Read carefully the "Study of a Child in Secondary School," pages 87-93. What contributions have been and are being made to Laurie's welfare by his home? What additional contributions might be made?

Are there conditions in his home which might be considered detrimental?

Exercise 8. What influence has the organization and social composition of a school on individual pupils?

Directions:

A. Read "Study of Child in Nursery School," pages 104-107. The graphs on pages 106, 107 show the distribution of the members of this nursery school with respect to height, weight, sex, age, I.Q., and nationality of parents. Indicate William's place on each graph. Is he unusual in any of these respects or is he near the center of the group? What influence may his position in the group with respect to these various characteristics have on his achievement, his social relations, his feeling about himself?

B. Read the description of Wilson Junior High School and the "Study of a High School Population in a School Environment," (pages 159-168). Read the "Study of Girl in Elementary and Junior High School," (pages 108-117). Ethel has been a student in Wilson Junior High School.

1. Make graphs showing distribution of this school population by age, I.Q., nationality of parents, occupation of fathers. Indicate Ethel's place on each.

achievement, health, interests and abilities, home background, and other characteristics with other pupils in this school?

3. Considering her age, her interests and abilities, her home background, her observed behavior, and her school record, how beneficial do you think attendance at this school has been for her? What factors in organization, management, social composition are conducive to her development and well-being? What factors may be detrimental to her welfare? Does

she show evidence in personality traits and behavior of the good or bad effects of attendance at this school? (Read "Study of Boy in Elementary and Junior High Schools," pages 118-124, and answer same questions for Tom.)

- C. Read the description of Lincoln Senior High School (pages 169-176). Read the studies of pupils in this school, Laurie (pages 87-93), Sam (pages 94-96), Angelina (pages 125-131).

1. Make graphs showing distribution of this school population by age, I.Q., attendance, nationality of parents, occupation of parents, completeness of homes, future plans. Indicate the place of Laurie, Sam, and Angelina on each.

2. "Place" each one in this high school population with respect to age, intelligence, achievement, health, interests and abilities, home background, use of time, and other

3. Considering each one's age, interests and abilities, home background, observed behavior and school record, how beneficial do you think attendance at this school has been for him or her? What factors in organization, management, social composition are conducive to his (her) development and well-being? What factors may be detrimental to his (her) welfare? Does he (she) show evidence in personality traits and behavior of the good and bad effects of attendance at this school?

STUDY OF CHILD IN NURSERY SCHOOL

Name: WILLIAM

School:

Study made: October, 1928

Date of birth: March 28, 1924 Birthplace: California

Grade: Nursery school

General Impression and Health

William is a tall, slender boy with a well-formed body, although slightly knock-kneed. He has light, bushy, lustrous hair. His skin is moist, smooth, and white; his ears and lips are rosy. His eyes are bright, clear blue; teeth in good condition; no nasal obstruction.

Activity Record, October 15, 1928, 9:30 to 9:50 A.M.

First five minutes: William is pulling two wagons fastened together. Takes them to sand box, drops handle. Sits on ledge of sand box and swings feet, taking up sand and letting it fall through fingers. Picks up wagon handle and pulls wagon, using both hands. Lifts it over a block which impedes

its progress. Boy is in way. Hits boy. Looks at teacher. Pulls wagon around garage and into side door of garage. Hitches two wagons together. Leaves wagons and moves chair out of way. Pulls wagons through door. Is heavy pulling. Uses both hands and faces wagons. Takes wagons to sand. Takes shovel out of wagon. Boy offers to help fill other wagon. William goes back to second wagon and says, "No, I don't want it. I only want one filled."

Second five minutes: Takes shovel full of sand. Pushes shovel into sand with both hands. To lift shovel, puts left hand near shovel with right hand at end of handle. Puts shovel on top of sand. Pulls both wagons through end door of garage. Takes hold of handle with one hand and pulls. Back wagon is caught on leg of table. Turns about, facing wagon, and uses both hands. Runs into table in back of him. Puts down handle and lifts front wagon to the side and out of way of table. Sits on end of table while watching other children for few moments. Hears voices of men near house. Leaves wagons near garage and goes near men. Watches men. Says, "Hey-hey-hey-what are you doing?" A teacher comes near. He says, "H-h-he's going. he-he's going to fix

Third five minutes: Picks up from ground a can which contains some sand. Goes around to each of eight wheels of wagons and, holding can in both hands, holds up to each wheel as though oiling them. Throws can away. Turns wagons about, holding handle of first wagon with both hands and facing wagons. Stops to watch child who is crying. Goes to house with teacher who is getting food for rabbits. Says, "Wagons will be here when I come back." Opens gate with left hand. Bumps his face but says nothing. Walks across yard. Puts left hand to forehead where he was bumped and rubs it with right hand. Gets pan to get water for rabbit. Holds pan in right hand. Uses left hand to turn on water.

Fourth five minutes: Goes into shed. Attempts to lift small box, but it is too heavy. Says to girl, "Come here." Girl says, "Come here." William semireclines on right side on sand, his left hand near his knee. Says to a child who is putting sand on a tiny child, "Hey-hey-hey-don't do it." Goes out to a large box at the side entrance to shed. Says to teacher, "Hey-hey-hey-he's going to take nails." William takes up hammer in right

hand, puts it down, and moves block in which nails have been pounded to a position nearer and more convenient. Pounds nails in, giving nail a firm stroke. Reaches over to container for another nail. Holds nail with left hand. Removes left hand and pounds. Nail bends slightly. Straightens it with right hand. Finishes pounding nail into block. Girl starts to take something away, and William says, "Hey-hey-hey," and goes after it.

Observation: School Environment

From an enrollment of 28 children, 9 boys and 6 girls were present during the observation period. Four assistants were in the yard. The play was in a spacious, sunshiny yard with trees, shrubs, and flowers on all sides. The play equipment consisted of boxes, barrels, wagons, wheelbarrows, painting materials, hammer and nails, etc. There were a platform with steps for climbing, inclined board, sand boxes, and a slide. A rabbit was kept in a box in one part of the yard, and two ducks waddled about the place. There was a garage at one end of the yard in which the children might play. A large sand pile was in one corner of the

Reports of Medical Examination

Height	Weight	Health rating
43½	35	slightly below average; vision normal; hearing normal; no digestive disturbance; good circulatory adjustments; no tendency to colds; chest well rounded; slightly knock-kneed. William is about 8 per cent taller than the average child for his age. He is 25 per cent underweight if one considers the average weight for his height and 8 per cent if one considers the average weight for his age. He has gained 2 lb. in weight during the last 2 years.

Psychometric Test Records

Test: Gesell	Date: April 16, 1928
Merrill-Palmer:	April 9, 1928
Minnesota	April 13, 1928
C.A.: 4-1	M.A.: 4-9
	4-6
	4-2

Family Background

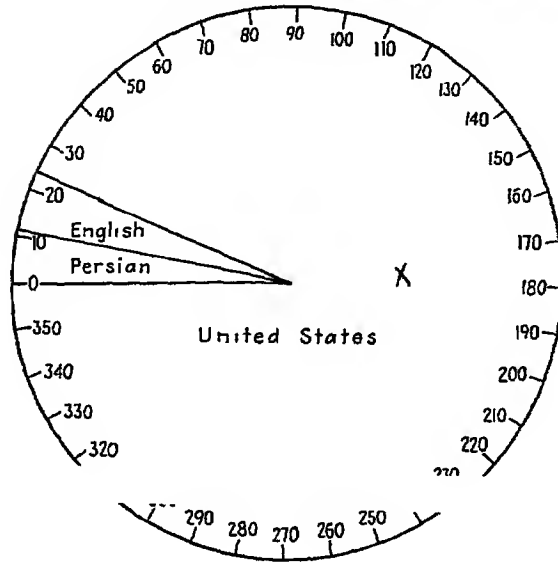
Parents: American, well educated, father leader in his profession.

Siblings: Youngest of three children, one brother, one sister.

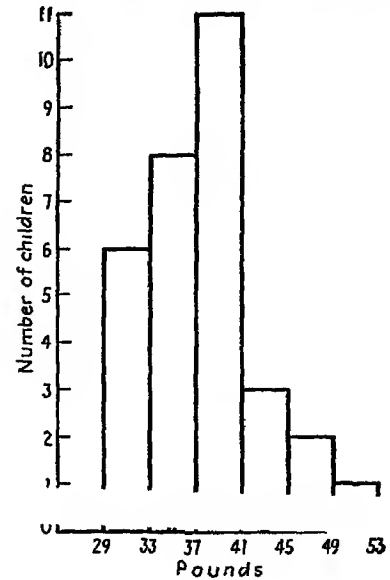
Home: Abundant fresh air and sunshine. Sun porch and playroom for children.

Preschool Group

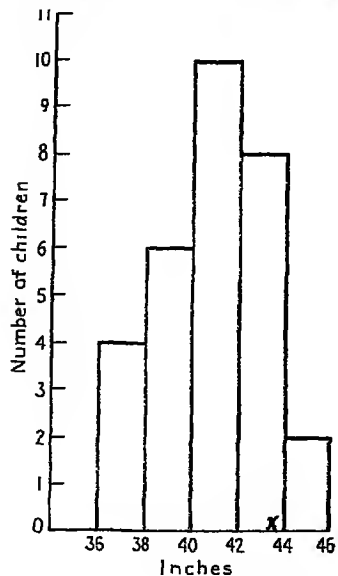
Group Distribution According to Nationality of Parents



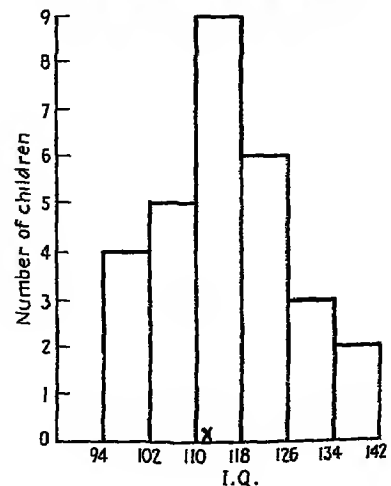
Group Distribution According to Weight

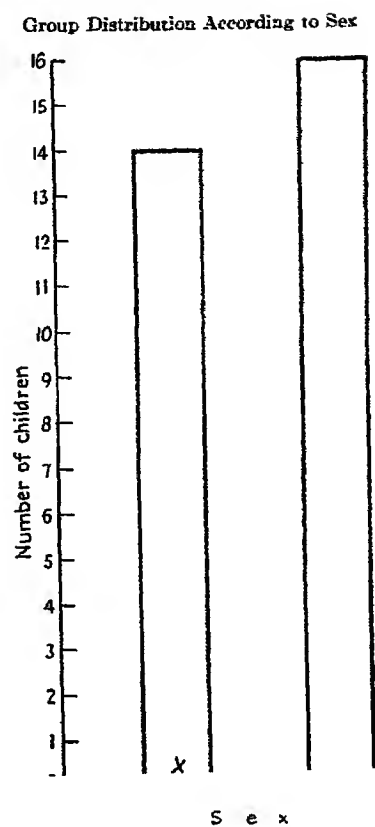
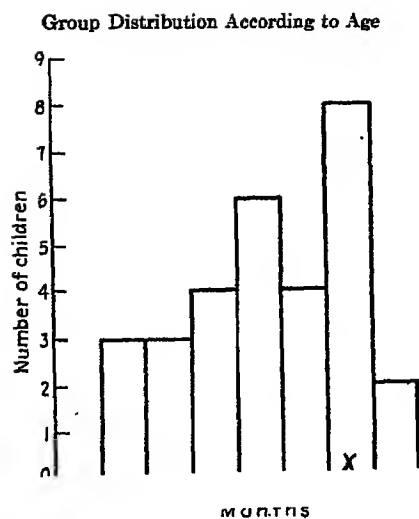


Group Distribution According to Height



Group Distribution According to I. Q.





STUDY OF GIRL IN ELEMENTARY AND SECONDARY SCHOOLS

Name: ETHEL

Date of birth: September 5, 1924

Birthplace: California

Schools: Washington Elementary, 1929-1935

Classes: Kindergarten to L 10

Wilson Junior High, 1935-1938

Lincoln Senior High, 1938-

Studies quoted: Fall, 1932 (H 3)

Date assembled: September, 1938

Spring, 1938 (H 9)

General Impression and Health

	Observers' reports Third grade, fall, 1932	Observers' reports Ninth grade, spring, 1938
1. Personal attractiveness.....	Dark eyes, short straight light-brown hair. Attractive	Attractive. Long brown curls held back by ribbon in old-fashioned style. No make-up
2. Clothing.....	Neat. Suitable	Suitable, colorful, current fashion. Ribbon and socks match. Sensible shoes
3. Facial expression.....	Singularly changeless and unrevealing. Perhaps bored	Reported as "alert and happy" by six observers, "sullen" by one observer on day when Ethel had a cold. Serious
4. Expressive movements.....	Few	Smiles frequently except on day suffering from a cold
5. Voice.....		Pleasant, low, clear
6. Bodily repose.....	Continually shifted position of arms and legs, pulled on hair	In general sits quietly. Pushes back curls, chews pencil, rubs face occasionally
7. Endurance.....	No observation of activity. Yawned often	Showed no signs of fatigue. Not constantly in action like some students in
8. Size and build.....	Tall; long limbs	Asthenic. Tall with long arms and legs. Small bones. Trunk and neck plump
9. Posture and gait.....	Walked and skipped easily	Moves easily and gracefully
10. Manipulative skill.....	Drew on board and carved skillfully. Sitting and walking posture good. Draws with left hand	Inclined to slouch. Skillful, well directed, effective. Probably left-handed but uses both hands
25. Teeth.....	White. Close together	White. Slightly protruding. Wearing bands
25. Arms and legs.....	Arms straight	Straight arms and legs
25. Wrists and knees.....	Slightly knock-kneed	Not enlarged. Small wrists and ankles
26. Hair.....	Thick, glossy. Straight	Plentiful, lustrous
26. Eyes.....	Clear and bright. No squinting	Bright, converging smoothly
26. Skin and subcutaneous tissue.....	Smooth, clear, slightly tanned skin. Firm, plentiful subcutaneous tissue	Smooth, delicate coloring. Little subcutaneous tissue
27. Musculature.....	Apparently well developed	Trunk well developed, legs and arms slim and undeveloped
28. Nose.....	No signs of obstruction; no mouth breathing	Breathes through mouth only when has a cold
29. Feet.....	Walked easily	Flexible, straight. In standing, weight shifted a little to inner edges

Activity Record

Child: **ETHEL**
Time: 1:30 to 1:50

Place: Washington Elementary School
Grade: H 3

Date: November 17, 1932
Boys: 12; Girls: 18

First five minutes: Sits listening to pupil reading. Puts hands on chair seat and leans forward. Watches teacher. Puts hand on chair next to her. Moves head back and forward. Smiles. Shows dimple. Puts teeth over lower lip. Yawns widely. Puts hands between knees. Leans back in chair. Opens hands on knees. Crosses knees. Clasps hands. Looks at children behind her. Yawns again (only two windows slightly open). Uncrosses knees. Rests hands in lap. Moves head back to look at teacher showing picture. Doesn't laugh, though many children do. Puts tongue out and in. Folds arms. Crosses right on left leg.

Second five minutes: Girl next to her gets in way of her view. She makes no especial effort to see. Sits quietly. Arms still folded on crossed knees. No particular expression. Unfolds arms. Puts right hand on chair in front of her. Looks back at windows, yawns again. Looks at children behind her. Rubs face with left hand and rubs

on right. Puts teeth over lower lip. Uncrosses legs and recrosses them the other way. Draws in lower lip. Turns around in chair.

Third five minutes: Brings knees up on seat and arms on back of chair. Turns back again. Girl sits next to teacher and reads aloud. Sits listening. Teacher sends two boys out and follows them for a moment. Ethel no expression. Looks nowhere in particular. Yawns again broadly. Smooths hair with left hand. Turns around. Turns back. Crosses right leg on left. Feels her knees. Smiles at girl next to her. Uncrosses legs. Puts hands between knees. Teacher says, "Who finds it hard to hear?" Among others, she raises her hand listlessly.

Fourth five minutes: Listens to girls next to her. Nods head. Smooths hair with right hand. Crosses left knee on right. Looks over shoulder of girl in front. Sits back again. Folds hands. Looks at teacher, draws in lips. Looks behind her. Leans on back of chair. Boy holds up book to show picture. She looks, but without much interest. Puts right hand behind head and rubs left eye. When some put up their hands, she looks around and does likewise. Others put theirs down.

She keeps hers up for no apparent reason. Takes it down.

Comments of Observers:

"When she took up her art work during recess, her concentration was profound. Fortunately, there seems to be opportunity for a great deal of art work in this class."

Observation: School Environment, Grade 3

Management.

November 10, 1932: Open house for parents at school and celebration of "Library Day." All the children dressed in costumes representing various characters in popular books. Seem very excited. Find their places and march in orderly fashion from playground to auditorium. When seated, talk and turn heads from side to side to see who is near them. Quiet when curtain is drawn.

A boy acts as chairman, makes a speech, and

comes to center of stage and recites a short rhyme describing the character he represents. Members of audience raise hands, and chairman chooses the one to give an answer. If character represented is well known, whole audience has already whispered it out loud before chairman has chance to choose anyone.

"It is very interesting to note how smoothly the program went off with just one pupil on the stage directing things. The teacher may have been behind the stage but could not possibly have kept all the children in order; so it must have been the children themselves who were responsible for the smooth running. They all seemed to know just about what was to be done and were not confused."

November 17, 1932: In halls with no teacher present, children act little differently than in classroom. Posture easy. Do not talk much. Stand in orderly line at drinking fountain. Walk quietly in threes and fours.

On playground boys wrestle and tumble over each other. Talk loudly. Yell. Girls play less exciting game. Some merely walk around. Two girls (including Ethel) sit quietly on the steps working at wood carving.

1:10 to 1:30 P.M.: Classroom cheerful and attractive. Class in informal circle in front of room. Only a few given opportunity to read aloud, and these seem to be ones who are generally called upon. They are alert and eager to read and to enter discussion, but a good many children take no active part in the procedure, and naturally their attention wanders. The teacher asks pupils to choose readers, and, of course, the best readers are chosen.

Teacher maintains a calm unruffled attitude. Asks class whether one of the boys is improving in

self-control; majority say yes, a few no, and give reasons.

Subject under discussion is Italy. Girl asks permission to play "Funicula, Funiculi" on phonograph. Another girl assists. Children listen quietly, smile often. Little girl tells about leaning tower of Pisa. Teacher shows slides of Italian scenes. Two boys are playing, are sent from room by teacher. Two boys are talking; one is questioned by teacher and his fault pointed out to him. One boy is not paying attention and bothering his neighbors; is sent to his desk by teacher.

Activity Record: H 9 Grade

Child: **ETHEL**
Time: 2:30 to 3:10

Place: Wilson Junior High School
Class: English

Date: March 14, 1938
Boys: 12; Girls: 14

First five minutes: Class just beginning. Ethel sits down, brushes back hair, talks to girl in front of her. Watches girls on other row. Sits watching them in class for a while. Sits with mouth

Throws back curls. Listens to teacher. Talks to girl next to her. Leans chin on hand and rubs forehead. Smiles at girl's conversation. Still plays with this bit of ribbon. Appears happy.

Second five minutes: Talks to boy on other side, still playing with ribbon. Erases marks in book. Plays with curls. Pins back hair. Still works with book while listening to another student's speech. Takes pencil and starts to draw faces on a large sheet of paper while listening to speeches. Strokes all well done. Seems to know how to draw. This goes on for about 10 min. while speeches last. Ethel does nothing but draw, hardly raising her eyes to look at the speakers.

Third five minutes: (This action takes place about 3:00 to 3:10, after Ethel has volunteered to assist in a panel discussion planned by a group of girls. They retire from the classroom and go outside to talk over the next day's plans.) Ethel walks to bench, sits down. Other girl stands in front of her. Ethel pulls other girl down onto her lap. Seems to do it with ease, although other girl is fairly heavy. Ethel points out errors in what one of the others has said (although not the leader of the group, she is evidently the one the others look to for the correct answers). Pushes back curls and brushes her forehead. Sits still without shifting around much. Other girl gets up.

Ethel changes position. Gazes around yard, still attentive.

Fourth five minutes: Ethel volunteers a little help but still maintains her place in the background.

show no sign of fatigue. Bell rings. The girls go back to the classroom. Ethel walks erect, passes out of sight, laughs.

Comments of Observers in Other Classes:

"Her textbook, covered with a tempting paper jacket, provides excuse for 10 min. of freehand drawing."

"Giggles when another girl whispers to her. Blushes when teacher catches her not paying attention but does not become excited."

"Some of her classmates, bound for the same destination as Ethel, pass her by, leaving her to walk alone. As she slouched along by herself, she struck me as being just a little lonely."

"In English class Ethel draws with right hand while girl is giving report but is listening."

"Draws on her book cover, erases. Works industriously even while wasting time. Watches class tryouts for a play a few moments with a blank expression on her face. Then returns to her drawing on her book cover."

"Teacher asks for girls to try out for fashion show. All respond except Ethel. When called on, takes the play and reads it off with surprising expression and dramatic ability."

Continually fingered the bands on her teeth throughout one 20-min. observation.

Observer's Comments on Class Management and School Environment, H 9 Grade

Spring, 1938

English class: 32 students present.

The class president is presiding. There is considerable confusion; everyone insists on talking at the same time. The teacher calls the class to order. The president announces that nominations are in order for members of the class who are to represent the class in a coming junior high conclave. Nominations, voting, and tallying operations take place. They vote for the contestants by raising hands while the candidates put their hands down on their desks. Total time: 25 min.

Algebra class: 14 boys, 13 girls.

Teacher assigns four problems to be put on the board. Done with little confusion and no hesitation. Paper is passed; then teacher begins to explain homework on the board. Hands raised with proffered solutions. A slight undertone of talk; all are attentive generally.

The temper of the group is friendly. Management is not particularly apparent, but yet is there in certainty when the teacher speaks to some-

with little confusion and no coercion.

They seem to react to class cooperation better than to the control of the teacher. They vote to choose the cast in a play, and the losers seem to accept defeat as a matter of course. There is much informality, but they achieve their aims, selecting the players.

Art class:

The students are seated at desks, painting on boards; one student at easel. Teacher has suggested they make designs suggested by radio programs. Each works independently but often seeks help and advice from the teacher or other members of the class. Each gathers his own equipment. They cooperate quietly. The management of the group is accomplished by arousing the interest of all and leaving each student to work out his plans independently. The temper of the group is that of intense interest. They are comparatively quiet, taking into consideration the size of the group. They talk and move about freely but quietly.

General comments:

Teachers seem to enjoy their work and have sense of humor. All the discipline in the classroom was handled indirectly by gaining the attention

tion by challenging material.

Kindergarten and

Attendance record			Health record		
Date	Grade	Days absent	Height	Weight	Notes, physical examination
Fall, 1929 5-	K		45½	40½	Smallpox vaccination, 1925. Condition good. Tonsils slightly red. Tonsillectomy this summer
Spring, 1930	K				
Fall, 1930 6-	L 1-H 1	9	47½	43	Physician noted slight heart murmur, not accentuated upon exertion. Mother notified
Spring, 1931	L 2	5			
Fall, 1931 7-	H 2	14	49	50	Eyes; R. 15/20; L. 15/20
Spring, 1932	L 3	1			
Fall, 1932 8-	H 3	12	53	59	Feels well, but runs slight temperature
Skipped	L 4				
Spring, 1933	H 4				
Fall, 1933 9-	L 5		54	66 5	Eyes; R. 20/20; L. 20/20
Spring, 1934	H 5	11	56 5	73	Slight heart murmur, less distinct than in 11/30 1/15/35: Out for week, slight temperature; heart sounds not good; activities to be curtailed; rest during lunch and no P.E. 5/7/34: Fractured left shoulder
Fall, 1934 10-	L 6	10	59	78	
Spring, 1935	H 6	14	60	87	

Washington Elementary School

Records of psychometric and achievement tests

Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
Stanford Binet	5	6-1	122		Good imagination, careful work with materials; ability to care for self; doesn't finish one problem before starting another; cooperates with group; interest in sewing; expresses ideas through painting; makes up own stories, voice good
					Timid and nervous; capable but does not crave limelight; often a leader; sews nicely; clay work good; painting best in room; has color sense; can tell famous stories, good flow of language, good voice; rather awkward
					C+
New Stanford Achievement					
Reading	6-8			9-2	C+
Spelling	6-8			8-5	
					B+
Kuhlmann-Anderson	7-8	10-5	136		R+
Unit Scale					
Spelling	7-8			9-11	
Geography	7-8			10-5	
Reading	7-8			11-1	
Arithmetic	7-8			9-9	
Language	7-8			11-7	
History	7-8			9-0	
					A
Skipped L 4					
Kuhlmann-Anderson	8-5	10-10	129		A
	9-3			11-7	A
New Stanford Achievement					
Reading	9-7				A
					A-
Kuhlmann-Anderson	10-6	13-5	128		A-
Spelling	10-4			11-10	
Unit Scale					

Wilson Junior

Attendance record				Health record		
Date	Grade	Days absent	Cause	Height	Weight	Notes, physical examination
Fall, 1935 11'	L 7	4	Cold	62	92.5	Undernourished in appearance, underweight, posture poor, arches of feet flat
Spring, 1936	H 7	7	Cold	63	94	
Fall, 1936 12'	L 8	10	Cold	64	105	
Spring, 1937	H 8	10	Flu, digestion upset	65	105	
Fall, 1937 13'	L 9	1	Cold	66	108	
Spring, 1938	H 9	5	Cold, boil			Eyes R. and L. 20/20; orthodontia in progress; posture poor
Lincoln Senior High School Fall, 1938 14'	L 10					

High School

Records of psychometric and achievement tests

Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
					Orientation A English A Conduct rating A Mathematics A Foods B Orchestra B Physical Education B
New Stanford Achievement (X) Arithmetic	11-9			12-10	Orchestra B English A Mathematics A Science A Art A Physical Education A
New Stanford Achievement (Y) Reading	12-6			16-10	English A Social Studies A Latin A Science A Orchestra B Physical Education A
New Stanford Achievement (X) Arithmetic	12-9			14-1	English A Social Studies A
					Science A Orchestra A Physical Education A
					English A Algebra A Latin A Orchestra A Dramatics A Physical Education A
New Stanford Achievement (Y) Reading Terman Group	13-6 13-6	17-2	127	17-0	Latin A School work A Dramatics A Capacity A Algebra A Application A English A Orchestra A Physical Education A Special abilities: art, violin Activities: athletics, Girl Reserves Socially well developed Vocational interests: medicine
					Latin Personal Management Geometry Orchestra Physical Education

Questionnaire (Elementary School)

1. How many brothers have you? 1 How many sisters? 0
2. To what clubs do you belong? 0
3. How many hours do you play indoors each day? 2 With whom? my brother
4. How many hours do you play outdoors each day? 4 With whom? my playmates and brother
5. Who are your favorite playmates? Susan, Nancy, Kay, Marion
6. What games do you enjoy most? Chinese puzzle, colors, cards, checkers, follow the leader, tag, play doctor
7. Have you any pets? yes Can they do any tricks? no One is a puppy, bird, fish, and turtle
8. Have you a garden? yes What do you grow in it? vegetables, flowers
12. What motion pictures did you see last week? 0
14. Do you take private lessons? yes In what?
15. Do you study at home? yes How many hours? 2 From 4 to 5 o'clock
16. Do you earn money? no
17. Do you have an allowance? no
18. Do you help at home? yes How? wash dishes, clean house
19. What time did you get up this morning? 7
What time did you go to bed last night? 7
20. What do you do all day?
Morning—get up, dress, eat breakfast, help mother and go to school
Noon—get my ticket, wash my hands and eat lunch, then go out to play
Afternoon—get out of school and play on the school grounds until mother comes
Evening—eat dinner, wash my teeth and go to bed
21. Draw roughly a map showing the distance you cover during one day.

home
|
stop sign
|
stop sign school
—□

22. How do you come to school? Automobile? yes

Spring, 1932 (L 3) reports:

My Pets:

My Father has some birds. He has some roller canaries and he has some other kinds of birds too. He has named them all too. One is snowball.

My Vacation:

I am going to the country where my grandfather lives. Brother is going too. We go barefoot and go swimming. The country I like. It is very warm there. We go out in the field every day. There is a man there that works in the field, we go with him and help him. When it is too hot there, we go to the creek. We are glad when school is out. When we get home we tell the children what we did.

L 7 Orientation Questionnaire

Subjects most enjoyed:

Art, literature, dramatics

1. Drawing, on which she spends about 4 hours a week at home
2. Music—plays the cello

Favorites among successful people:

Admiral Byrd

Will Rogers

Considers Will Rogers a great hero because he had friendliness, humor, and was well loved by Americans

Favorite sport: Swimming

Attends movies occasionally; likes Will Rogers pictures the best of any. Shirley Temple

Ethel's Home Situation and Family Background

Parents: Both born in the United States; both of Anglo-Saxon stock; both college graduates with some additional years of training; both actively engaged in professional work.

Siblings: One brother 2 years older than Ethel. Has attended same schools. Has in general maintained a 2 years' lead in school.

Home: In superior residential district. Family owns at least one automobile and drives the children daily to school. Father has an aviary in which whole family is interested. Vacations have been spent on a farm. (See health record and third-

grade questionnaire for other items concerning family.)

School Situation

Washington Elementary School: A small city school, six grades and kindergarten, modern in aim and spirit. Playground space about $\frac{1}{3}$ acre, rectangular, asphalt surface, level; some apparatus, good supply of balls, etc. Building one story, around a court. An auditorium for assemblies.

H 3 classroom: Large enough to permit class of 30 to move about freely. Stationary desks and movable chairs. Space in center of room where

children may gather informally. Shelves of books in one corner, art supplies in another. A phonograph, a project table. Adequate lighting. Pictures on wall, flowers on table.

Description of School Group

High third, spring, 1932

Age range: 96 to 105 mo.

Height range: 49 to 56 in.

Weight range: 55 to 80 lb.

I.Q. range: 102 to 136

Wilson Junior High School. See pages 163-168

Lincoln Senior High School. See pages 169-176

STUDY OF BOY IN ELEMENTARY AND JUNIOR HIGH SCHOOLS

Name: Tom

Date of birth: September 3, 1919

Birthplace: California

Schools: Washington Elementary School, 1926-1932

Wilson Junior High School, 1932-1934

Studies quoted: Fall, 1929, L 4

Fall, 1932, L 7

Fall, 1934, L 9

General Impression and Health

	Observers' reports, Fall, 1929, L 4 <i>104</i>	Observers' reports, Fall, 1932, L 7 <i>128</i>	Observers' reports, Fall, 1934, L 9 <i>154</i>
1. Personal attractiveness.	Healthy-looking, very ruddy cheeks; not scrawny	Pleasant, responsive, not athletic. Hair unruly	Dark and handsome, good-natured smile. Healthy and alert
2. Clothing.....	.....	Neat and clean	Clean and appropriate; good shoes, sweater and pants
3. Facial expression....	Happy, untroubled	Fairly interested; happy; at times a little bored	Serious at times; alert; lights up suddenly with a smile
4. Expressive movements.....	Blinks eyes	.....	Smiles suddenly
5. Voice.....	.....	Articulation good, voice high-pitched	Low; clear; good resonance
6. Bodily repose.....	Composure marked; not constantly moving about	Few body movements during class. Sat quietly while studying. Not restless	Good, though does change, position often
7. Endurance.....	Plays hard, does not tire	Does not tire quickly	Works steadily with apparent concentration
✓ 8. Size and build.....	Very slender	Arms and legs long in proportion	Tall and slender. Asthenic
9. Posture and gait....	Manages body well	Good posture; good control of movements; walked with grace and ease	Graceful; good coordination, vigorous and effective
25. Teeth.....	Need straightening	Clean, uneven, irregular	Not very regular
25. Arms, legs.....	Slender, straight	Straight, long	Long, straight
25. Wrists, ankles.....	Not enlarged	Not enlarged	Not enlarged
26. Hair.....	Luster good	Plentiful, lustrous	Plentiful; shiny
26. Eyes.....	Bright, clear	Clear, normal movements	Bright. Blinked some in algebra class
26. Skin, subcutaneous tissue.	Ruddy, clear, smooth; very little subcutaneous tissue	Clear, smooth, ruddy; subcutaneous tissue firm, not plentiful	Smooth, dark; subcutaneous tissue plentiful and firm
27. Musculature.....	Slight, well distributed	Firm, evenly distributed	Well developed
28. Nose.....	Obstructed; mouth open	Mouth open a good deal	Clogged; had cold; mouth habitually open
29. Feet.....	Strong, flexible	Strong, limber, inner border straight	Not flat-footed

Activity Record

Child: Tom
Time: 11:15 to 1:35

Place: Wilson Junior High School
Grade: L 9

Date: Fall, 1934
Class: Arithmetic

First five minutes: Class doing arithmetic problems. Tom writing with right hand in notebook. Looks from notebook to arithmetic book. Turns page with right hand. Writes. Looks at blackboard. Turns around in seat. Smiles and says something to boy behind him. Writes again. Puts left hand in pants pocket. Takes it out, rubs pencil through hair, writes some more. Turns page back with left hand. Reaches for eraser from boy's desk across aisle. Erases figures with right hand. Keeps eraser. Writes more figures.

Second five minutes: Frowns slightly at figures. Looks up at diagram on board. Gives eraser back to boy with left hand. Writes. Rubs left hand on pants. Teacher tells class to stop working. Tom looks up and smiles. Closes book. Swings around in seat toward blackboard. Turns around to look at girl. Teacher questions. Puts pencil in mouth with right hand. Twists toward back of seat as teacher calls on someone else. Turns back again as teacher talks. Smiles. Teacher

designated place, using both hands. Turns pages with right hand.

Third five minutes: Looks at problem. Writes. Puts pencil in mouth. Looks out of window across room. Points toward window with right hand. Says something to boy behind him. Smiles. Faces forward and writes. Jiggles feet up and

down with toes on floor while writing. Looks at blackboard. Writes. Smiles when teacher tells students to stop. Leans over to talk to boy. Closes notebook with right hand as teacher asks them to pass notebooks forward. Smiles and talks with boy behind him. Takes notebooks from boy with right hand and passes them with right hand to girl in front. Points to one of notebooks with right hand. Says something to girl. Smiles as she says something to him. Picks up one of notebooks girl drops. Smiles. Laughs at something boy behind him says. Talks with him.

Fourth five minutes: Is quiet as teacher tries to quiet class before dismissing those going home early for lunch. Walks to blackboard. Picks up chalk with right hand. Draws tit-tat-toe diagram on board. "What do you take, cross or circle?" to boy joining him. Plays game out, talking and laughing, using short sentences. Another boy joins them. Tom playfully pushes him out of the way. Runs around row of seats as boy starts for

diagram. They all laugh as they tell each other where to put marks. Tom says, "Put it there, I'll put mine here." Points and laughs. Erases diagram with right hand; says, "I won," laughs. Tom and other boys jostle each other as they watch another boy draw cartoons on board. They laugh.

Attendance record					Health record
Date	Grade	Days absent	Height	Weight	Notes, physical examination
Spring, 1926	L 1	27			(1925: Diphtheria carrier; chicken pox, whooping cough, measles before entering school.)
Fall, 1926	L 1	13	47	43	Undernourished. Poor posture. Nose obstructed. Tonsils enlarged. Parents advised
Spring, 1927	H 1	7			
Fall, 1927	L 2	5	51	52	Posture good. Nose and throat in good condition. Physician reports tonsils removed
Spring, 1928	H 2	42			
Fall, 1928	L 3	1	53	58	Good general condition. Vision good
Spring, 1929	H 3	20			
Fall, 1929	L 4	18	56	66	
Spring, 1930	H 4	9			
Fall, 1930	L 5	2	57	69	Vision good. Somewhat undernourished
Spring, 1931	H 5	1			
Fall, 1931	L 6	34	58	79	
Spring, 1932	H 6	8	59	85	

Elementary School

Records of psychometric and achievement tests					Neatness	Application	Reading	Pennmanship	Spelling	Arithmetic	Language and Composition	Geography and History	Music	Art	Manual Training	Physical Education	Nature Study
Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments												
					C	C	F	F									
					C	C	B	C									
					B	B	B	B		C							
					B	B	C+	B	B	B							
					B	B	C+	B									
Public School Test 5					B	B	C	C	C	C	B	B	C-	B			
Computation	9-2			10													
Reasoning				9													
National Intelligence	9-8	9-9			A-	A	B+	A	B+	A	B+	B	C	C			
New Stanford Achievement	10-2				B	B	B+	B	B	B	B	A	B-	B	B		
Reading				10-8													
History				10-10													
Computation				11-6													
Mathematics:																	
Reasoning				10-6													
Spelling				7-6													
Language				12-7													
Geography				10-7													
					B	B	A	B	B	B+	B-	A	B	B	A		
					B	B	A-	B	B	A	B	A	B	B	B	A	
New Stanford Achievement	11-9				B	B	A	B	B+	A	A-	A	A	B	A	A	
Reading				13-6	Test shows very poor spelling; vowels correct, consonants confused in dictation												
Computation				13-3													
Mathematics:																	
Reasoning				12-11													
Spelling				9-9													
Language				13-5													
Geography				10-10													
History				13-1													
Kuhlman-Anderson	12-5	12			B	B	A	B	B	B	A	A	A	B	B	A	B
	12-9	13-1															
					B	B+	A	B	B	A	B+	B	A	B	B	A	B

Wilson Junior

Attendance record				Health record		
Date	Grade	Days absent	Cause	Height	Weight	Notes, physical examination
Fall, 1932	L 7	3	Cold, illness, influenza	60	85	No smallpox vaccination recorded to date. Posture good. Nose and throat in good condition. Vision good. Seems under-nourished
Spring, 1933	H 7	5	Influenza, bronchial trouble; threatened with appendicitis; marching in parade; went to circus			
Fall, 1933	L 8	1	Cold			
Spring, 1934	H 8	4	Visit to doctor; bronchial trouble; sprained foot; visit to doctor; overslept			Has gained 4 lb. since last visit. Feels fine now. To have eyes examined
Fall, 1934	L 9			65	110	Eyes: R. 20/20; L. 20/20 Hearing satisfactory by whisper test

High School

Records of psychometric and achievement tests					
Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
					English B/B Mathematics B Social Studies B Wood Shop C Drawing C Science B Music B Orchestra C/drop Physical Education B Activities: Student body, orchestra
					English B Social Studies B Spanish D x Drawing C Science C Physical Education B Activities: Student body, health council
					English C Mathematics C Social Studies C Spanish C Wood Shop B Physical Education B Activities: Student body, scouts, club outside school
					English B Social Studies B Wood Shop C Science A Music C Physical Education C Activities: Student body, scouts, club outside school
					English B/B Mathematics D/C x Spanish A/C+ Science C/D Physical Education B/B Activities: Working for Junior Red Cross certificate Spelling poor. Often omits vowel Expects to go to college; no other future plans

Home Situation and Family Background

Parents: Both born in the United States, father of Latin descent. Father employed as foreman; mother's occupation is housewife.

Siblings: One sister, one brother, older than Tom.

Home: In pleasant district of modest homes. Telephone. Family takes a newspaper, has a radio, lives near a playground and park. No pets, no garden. Place for home study, some books. Much evidence of family solidarity. From fourth grade on Tom has had a share in household tasks; in fourth and fifth grades he had an allowance, used for Sunday school, savings bank, and candy. His

reports on home routine show three meals a day, 3 to 6 hours of outdoor play plus some indoor play in the spring of 1932, practicing violin music since the fall of 1930. Bedtime: 7:30 in fourth and fifth grades and 8:00 in sixth grade.

School Situation

Wilson Junior High School: See pages 163-168. Large classes meet in relatively small rooms. No adequate means of heating in some rooms. Socialized program. Every effort made to develop children into happy, healthy, successful beings. Some children noisy, uninterested, and indifferent.

STUDY OF GIRL IN SECONDARY SCHOOL

Name: ANGELINA S.

Date of birth: September 10, 1915

Birthplace: Italy

School: Lincoln Senior High

Studies quoted: Fall, 1929; Fall, 1931

Data assembled: March, 1933

General Impression and Health

	Observers' reports, fall, 1929	Observers' reports, L 10, fall, 1931
1. Personal attractiveness...	Overweight	Short, sturdy, fat, but rather attractive. Short black hair which gets in her eyes. Olive skin, small features, a few freckles
2. Clothing.....	Dress neat though not stylish. <u>Stockings dirty, shoes "run over" at heels.</u> Used no powder or rouge	Sensible. Shoes in good condition. <u>Neat, well-cared-for appearance</u>
3. Facial expression.....	Not alert. Sometimes happy, sometimes scowls and pouts	Rather contented. Serious, calm, not alert
4. Expressive movements....	Nods head and waves hands in approval and disapproval. "Makes faces"	Many grimaces. Extensive use of gestures. Arches eyebrows when talking
5. Voice.....	Clear. No accent	Low but distinct
6. Bodily repose.....	Good deal of unnecessary activity, as: looking around, grinning, biting lips, scratching head	Bites lips. Grimaces
7. Endurance.....	No report	No report
8. Size and build.....	Pyknic build. Short and stocky. Mature appearance	Sturdy and rather fat. Pyknic build
9. Posture and gait.....	Shoulders rounded, tendency to stand on one foot.	Muscular coordination smooth and effortless. Sits erect in seat
10. Manipulative skill.....	Muscular coordination prompt and efficient. Uses right hand	
25. Teeth.....	Clean, well formed	Clean, regular
25. Arms and legs.....	Long bones straight	
25. Wrists, knees, ankles....	Joints in proportion to limbs	Ankles protrude evenly on inner and outer sides
26. Hair.....	Plentiful. Not lustrous	Plentiful. Glossy
26. Eyes.....	Squints quite noticeably. Dark shadows under eyes	Sometimes wears glasses. Eyes move normally
26. Skin and subcutaneous tissue	Pimply. Oily. Ruddy. Subcutaneous tissue excessive. Not firm	Smooth. Subcutaneous tissue extremely plentiful. Firm
27. Musculature.....	No report	Well developed
28. Nose.....	Unobstructed	Breathes through nose
29. Feet.....	No report	Small, flexible

Activity Record

Child: ANGELINA S.
Time: 1:40 to 2:00

Place: Lincoln Senior High School
Class: Textiles

Date: October, 1931

Begin at 1:40: Working on dress; pressing. Engrossed, pays little attention to other girls. Right-handed. Collects scraps, etc., puts pins carefully into cushion in sewing box. Takes dress to teacher, who tells her something is wrong and shows her what must be done. She objects a little; teacher smiles and repeats. Angelina acquiesces and goes back to sew. Very precise in stitch taking, rather slow. Talks to no one in particular about something. Bites her thread instead of using scissors. Works continuously. Takes dress to teacher. "Didn't I do right?" Teacher tells how it must be done, does a few stitches as a sample. Smiles, goes back to desk. Works a while. Then sighs, goes to fitting room.

Time: 12:40 to 1:10 Class: Biology
Date: October, 1931

Begin at 12:40: Angelina sits quietly reading school paper. Calls attention of girl (R.) to something in it. Bites lower lip. Scratches head. Nods head. Scratches head. Brushes hair back. Talks to girl (L.). Looks at teacher. Listens. Looks down at book. Bites lip, opens purse, yawns, sits up straight. Looks at observer. Gets pen out. Bites lip. Writes dictation. Looks to see what girl on left has written. Bites thumb, smiles, talks to girl on left. Bites lip. Looks around left. Not paying attention. Turns to back page of notebook to show girl something. Looks at the boy who is explaining his experiment. Class laughing at him. Teacher smiling. Angelina smiles a little. Bites lip, looks at what neighbor has written. Bites lip. Looks to other side. Holds notebook up to face. Smiles. Looks at boy. Rubs chin. Paying attention. Chews tongue. Looks around at observer. Writes what teacher says. Looks up. Seems very placid.

Not dreadfully interested. Talks to girl on left. Writes. Puffs out cheeks. Looks at teacher. Looks at girl's notebook. Chews lip. Yawns. Pinches nose. Looks at teacher. Rubs nose. Listens to pupil reporting experiment for a few seconds. Looks at experiment. Talks to girl. Keeps on writing, even when boy drops beaker on floor. Teacher talks rather humorously. Angelina half smiles. Talks to girls. Watches boy. Class laughs at answers. Angelina smiles. Boy makes bright remark. Angelina looks at teacher. Adjusts her collar. Writes. Then laughs with class heartily. Looks at observer. Giggles. Teacher announces test for tomorrow. Angelina makes a face. Looks at teacher. Pinches nose. Walks out with class.

Observation: School Environment, L 10 Grade

October, 1931: Spanish class. Air: 65°, good circulation, no drafts; no odors. Light from four windows, to left of pupils; double shades well regulated to avoid glare. Equipment: ordinary classroom; room not crowded, neat.

Biology class. Air: 76°, only one window open; no air circulation noticeable. Light from windows on right side inadequate for work with microscopes. Equipment: plants, charts, microscopes, chemicals, moving-picture machine, reference books, and pamphlets; neat, orderly, well cared for.

Management: Work quite formal in some classes; in others, more freedom permitted. Good cooperation between students and teachers in classroom. In halls: no boisterousness or disorder; no policing by teacher. Girls gathered in groups or "paired off," chattering excitedly; boys the same, but less chatter. A few aloof from everyone. Very little boy-and-girl pairing.

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Washington Elementary School, Wilson Junior

Attendance record						Health record
Date	Grade	Days absent	Cause	Height	Weight	Notes, physical examination
Fall, 1923	L 2	45		50	65	Has been vaccinated. Teeth not in good condition. Eyes show signs of strain. Throat inflamed
Spring, 1924 Fall, 1924	H 2 L 3					Hyperopia; tonsillectomy
Spring, 1925 Fall, 1925	H 3 L 4	2				Teacher reports she has difficulty seeing. To clinic for examination of eyes; under mydriatic
Spring, 1926 Fall, 1926	H 4 L 5			57	94	Did not return to clinic; will return. In good general condition
Spring, 1927 Fall, 1927	L 5 (repeating) H 5					
Spring, 1928	L 6					
Fall, 1928	H 6	5				
Wilson Junior High School Spring, 1929	L 7					
Fall, 1929	H 7			61	144	Posture poor, fallen arches. Poor vision. Teeth need attention
Spring, 1930	L 8 H 8				148½	Wears glasses. Good physical condition but overweight. Eats regularly and too much starch. Advice given
Fall, 1930	L 9	2	Ill	60½	147 (month later 143)	
Spring, 1931	H 9	1	Cold		133	

High School, Lincoln Senior High School

Record of psychometric tests and achievement tests

Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
					Fair minus. <u>Conduct: good</u>
					Fair
					Fair minus
					Fair minus Poor
National Intelligence	11-8	10-10			Fair. School work C Capacity C Fair. Application C
Woody-McCall Arithmetic	12-5			11	Fair. School work C+ Capacity C- Application A
National Intelligence	12-5	11-7			
Woody-McCall Arithmetic	13-1			13	Good
New Stanford Achievement					
Reading	13-5			12-7	English B Physical Education B
Mathematics				12-1	Mathematics C
Spelling				14-3	History B
Science				12-4	Science B
History				11-5	Home Economics B
Languages				13-0	Art B Music A ✓
Terman Group	14-1	12-9			English B Spanish A ✓ Mathematics C Home Economics B History B Music C Science ✓A Physical Education B
					English B Mathematics B History D ✓ Science A Spanish B Art A ✓ Music C Physical Education B Activities: Glee Club <u>Promoted in middle of semester. "Older, larger, and more mature than her classmates and capable of doing creditable work"</u>
					English B Spanish B Clothing B Junior Business Training B Physical Education B Vocational interest: Secretarial work; to go to business college
					English B Spanish B Clothing B Junior Business Training B Physical Education B

Attendance record						Health record
Date	Grade	Date absent	Cause	Height	Weight	Notes, physical examination
Lincoln Senior High School Fall, 1931	L 10	1	Ill	61½	152 (2 months later, 150½)	
Spring, 1932	H 10	1	Head-ache	61	145	Good physical condition. To get diet list. Condition satisfactory for biology field trip
Fall, 1932	L 11			61	150	

Use of Time

Day's routine*	May, 1929	May, 1931
Hours sleep	11	10
Home study	2 hr. per week	3 hr. per week
Helping at home	1 hr. per day; 4 hr. per day week ends	2 or 3 hr. every day
Working for self	None	About 1 hr. per day; irons middies, sews on a dress; puts up lunches
Leisure time	"Play" 1 hr. indoors every day. 3- to 4-hr. week ends. Ride 1 hr. on Sunday.	Went to baseball game, played cards. Friends came to house, visited friend 4 days during week. Read paper 2 days, "show" 1 night, shopping 3 hr. on Saturday.
Church	Early mass	None
Personal care	"Dressed and ran to school"	Some reference made every day. "Got up and dressed" about ¼ hr. each day. "Bath" Saturday A.M. "Dressed" to go to girl's house, 1 hr.

Food: May, 1929: Eats breakfast on Saturday and Sunday only. Sunday dinner; fruit salad, fried chicken, fried potatoes, chocolate. May, 1931: Breakfast on Saturday and Sunday only. Week-day lunch: two egg sandwiches, two oranges, ice-cream cone.

Family Background and Home Situation

Parents: Both born in Italy. Father's occupation, truck driver; Mother's occupation, housewife. Angelina born in Italy, came to California at age of 7. Lives with both parents.

Home: Live near school, in district of pleasant small homes, chiefly separate dwellings on 60-ft. lots. Have a telephone.

For description of Lincoln Senior High School see pages 169-176.

* This information was obtained from two series of reports made by Angelina, covering her use of time for 1 week, May, 1929, and 1 week, May, 1931.

Record of psychometric and achievement tests					
Test	C.A.	M.A.	I.Q.	Standard reached	Subjects, marks, teachers' comments
					English B Typing C Biology B Clothing B Spanish B Physical Education B
					English B Biology B Spanish B Typing C Clothing A Physical Education B Vocational interest: Uncertain as to whether she wants to do office work or go into home economics
					English B Crafts C Spanish B Physical Education A Shorthand C

Exercise 9. What can we learn about one child by comparing him with others of his age group?

Purpose: To gain skill in judging a child's developmental progress by finding wherein he is like and wherein he is unlike other children of his age.

Directions:

A. Read the "Study of Child in Nursery School," pages 104-107. Read Chapter III, pages 25-54,

paying particular attention to the characteristics of two-year-olds and five-year-olds. Since William was 4 when this study was made, you would expect him in most characteristics to be more advanced than most two-year-olds, less advanced than most five-year-olds. Estimate his developmental progress in the fall of 1928, using the following form:

Item	Evidence	Rating			
		+	=	-	?
12. Growth in size					
13. Body proportions					
14. Organ maturity					
15. Body management					
16. Language					
17. Emotional control					
18. Attention span					
19. Problem solving					
20. Orientation					
21. Intellectual ability					
22. Self-direction					
23. Use of time					
24. Social responses					

Key to rating: + Development markedly advanced
 = Found in most children at this age
 - Markedly retarded
 ? Evidence conflicting or insufficient

B. Read the "Study of Girl in Elementary and Secondary Schools," pages 108-117. Read Chapter III, paying particular attention to the age-level characteristics of children 8 to 12 and 13 to 18. Estimate Ethel's developmental progress in the spring of 1938.

Item	Evidence	Rating			
		+	=	-	?
12. Growth in size	Her measurements are slightly below the average for her age.		+		
13. Body proportions	She has somewhat broad feet for her age.		=		
14. Organ maturity	Her teeth are slightly below the average for her age.				
15. Body management	She has a good posture and is well-dressed.				
16. Language	She speaks clearly and is well-mannered.	+			
17. Emotional control	She is calm and self-controlled.				
18. Attention span	She is able to concentrate on her work.	+			
19. Problem solving	She is able to solve problems on her own.	+			
20. Orientation	She is able to find her way around.				
21. Intellectual ability	She is able to read and write.	+			
22. Self-direction	She is able to plan and execute her work.	+			
23. Use of time	She is able to use her time wisely.	+			
24. Social responses	She is able to get along with others.		=		

C. Read the "Study of Boy in Elementary and Junior High School," (pages 118-124). Read Chapter III, paying particular attention to the age-level characteristics of children 8 to 12 and 13 to 18. Estimate Tom's developmental progress in the fall of 1934.

Item	Evidence	Rating			
		+	=	-	?
12. Growth in size	Underweight at 10 yrs, 13 yrs & 15 yrs				
13. Body proportions	Tall, slender, aerobically				
14. Organ maturity	OK				
15. Body management	well coordinated, not restless, good control of movements in walking.				
16. Language					
17. Emotional control	Good natural, peace of concentration, sermious about.				
18. Attention span	10 min. in L. 9				
19. Problem solving	Ability, reasoning power higher than C.P. does well in area subject for 1				
20. Orientation					
21. Intellectual ability	Has ability in both science & physical science but not in all most of abilities (a & in R.P. & P.)				
22. Self-direction	OK.				
23. Use of time	Waste time according to other. - does work easily.				
24. Social responses	Pleasant, well adjusted - gets along well with other children				

Exercise 10. What can we learn as to a child's success as a person, considering his age and abilities?

Purpose: To gain skill in estimating how well an individual is using his abilities for his own and others' welfare.

Directions:

A. Review the "Study of Child in Preschool," pages 84-86. Write in the form below your estimate of the degree to which Dick is successful. Show in what respects his behavior is adaptive, in what respects maladaptive, considering his age and abilities, and what in general constitutes successful behavior for children of 5.

Item	Evidence	Rating			
		+	=	-	?
61. Personal care and health maintenance					
62. Vocational plans and activities; satisfaction in work					
63. Social conformity in essentials; participation in family life					
64. Sound attitudes toward things in general and toward self; satisfaction in relationship with nature, in human relationships					
65. Personal tastes and interests, rich and varied					

Key to rating: + marked, outstanding
= ordinary success

- more or less failure
? evidence lacking or unsatisfactory

B. Read the "Study of Girl in Elementary and Secondary Schools," pages 108-117. Write on the form below your estimate of the degree to which Ethel is successful. Show in what respects her behavior is adaptive, in what respects maladaptive, considering her age and abilities, and what in general constitutes successful behavior for children of 14.

Item	Evidence	Rating			
		+	=	-	?
61. Personal care and health maintenance					
62. Vocational plans and activities; satisfaction in work					
63. Social conformity in essentials; participation in family life					
64. Sound attitudes toward things in general and toward self; satisfaction in relationship with nature, in human relationships					
65. Personal tastes and interests rich and varied					

C. Review the "Study of Girl in Secondary School" (pages 125-131). Write on the form below your estimate of the degree to which Angelina is successful. Show in what respects her behavior is adaptive, in what respects maladaptive, considering her age and abilities, and what in general constitutes successful behavior for children of 17.

Item	Evidence	Rating			
		+	=	-	?
61. Personal care and health maintenance					
62. Vocational plans and activities; satisfaction in work					
63. Social conformity in essentials; participation in family life					
64. Sound attitudes toward things in general and toward self, satisfaction in relationship with nature, in human relationships					
65. Personal tastes and interests rich and varied					

Exercise 11. What kinds of recommendation for educational guidance can be based on observation and school records?

Purpose : To evaluate recommendations in the light of their usefulness.

- They should apply to the child as he is actually shown to be by records or observations or both.
- They should be intelligible, reasonable, sensible.
- They should be specific; the majority should be applicable within the next 6 months.
- They should take account of the child's likeness to other children as well as his unique characteristics.

Directions :

A. Review "Study of Girl in Elementary and Secondary Schools" (pages 108-117). Review Exercises 8 and 9 if done in reference to Ethel. The following recommendations have been made by students of Ethel. Check them as good or poor, or as having elements of both goodness and poorness and give reason for your decision.

B. Add recommendations you would like to make to Ethel's parents and teachers which would make her life happier and richer.

Recommendation and criticism	Good	Poor	Both
<p>In regard to health:</p> <p>1. "Her heart condition should be checked carefully, and outdoor exercise should be insisted on for the development of greater endurance." Criticism: <i>should get out of the house</i></p>			
<p>2. "It is important that at this age Ethel have more sleep and nutritious food." Criticism: <i>should get out of the house</i></p>		✓	
<p>3. "She should be encouraged to improve her posture but she should not be nagged at." Criticism: <i>should get out of the house</i></p>	✓		

Recommendation and criticism	Good	Poor	Both
<p>4. "Check for cause of breathing through mouth to determine whether any measure can be taken to improve condition."</p> <p>Criticism: <i>Don't breathe out of mouth</i></p>		✓	
<p>5. "As to Ethel's health, it appears that she is receiving adequate care—the reports indicate that her nutrition is not of the best."</p> <p>Criticism: <i>There is no indication of good nutrition</i></p>		✓	
<p>6. "Because of her rapid growth and development she should not participate in strenuous exercise."</p> <p>Criticism:</p>			
<p>In regard to developmental progress:</p> <p>7. "She would be benefited by a year's vacation between high school graduation and college, for she is too young, and her health would benefit from a rest."</p> <p>Criticism: <i>She is not too young and her health would be benefited by a school year or a summer college year.</i></p>		✓	
<p>8. "She has intellectual and physical abilities and the most should be made of them."</p> <p>Criticism: <i>She is making good use of her abilities at the time of observation.</i></p>	✓		

Recommendation and criticism	Good	Poor	Both
<p>9. "Cause of nervous mannerisms should be investigated and solution sought."</p> <p>Criticism: <i>She has nervous mannerisms. Cause of this has not been determined.</i></p>			
<p>10. "Needs additional class work—has unused time and excess abilities."</p> <p>Criticism: <i>She does not seem to be interested in doing more work. She is a very bright child.</i></p>			
<p>11. "Should skip a grade."</p> <p>Criticism: <i>She would be overworked. She could be encouraged to do more work.</i></p>			
<p>12. "Social development is in arrears. Outside social activities advised."</p> <p>Criticism: <i>She should be encouraged to be more social. She is a very quiet child.</i></p>			
<p>In regard to adaptive success</p> <p>13. "Since she has interest in music take her to symphony concerts."</p> <p>Criticism:</p>			
<p>14. "She should be encouraged to participate in family activities."</p> <p>Criticism: <i>She does participate in family activities.</i></p>			
<p>15. "She should be given a chance to widen her interests."</p> <p>Criticism:</p>			

Recommendation and criticism	Good	Poor	Both
<p>16. "She should enter some informal organization, as Girl Reserves."</p> <p>Criticism: <i>She is not interested in such organizations.</i></p>		<input checked="" type="checkbox"/>	
<p>17. "Encourage interest in dramatics—it is more social than most of her interests."</p> <p>Criticism: <i>She is not interested in dramatics.</i></p>	<input checked="" type="checkbox"/>		
<p>18. "She should be seated in center of class activity near other girls."</p> <p>Criticism:</p>		<input checked="" type="checkbox"/>	
<p>19. "Since a professional woman does not have the time to devote to her family that the average housewife has, Ethel is deprived of intimate relationships of mother and daughter."</p> <p>Criticism:</p>	<input checked="" type="checkbox"/>		

CHAPTER V

STUDY OF CHILD IN PRESCHOOL

(Use record forms in Workbook I, Developmental Report on Preschool Child)

We assume that the student will have an opportunity to visit a preschool and to watch a child working and playing. He will also inspect the physical plant of the preschool, observe the routine, and establish acquaintance with the teachers and assistants.

In addition to this first-hand observation, the student will have access to a set of recorded observations of the child he is studying, made available for his study and reflection in a convenient workroom. What he has himself seen and heard, what others have noticed and commented upon, and occasionally the drawings, toys, or other tangible achievements of the child himself, supply the student with materials which, assembled and integrated by reflection, ordinarily present an intelligible picture. As we consider this heterogeneous mass of material, this one child seems to "come alive," his behavior begins to make sense to us, and we are ready to prepare a tentative description of him as a person.

From the standpoint of usefulness in education, the study of any child includes three operations: the collection of information, the organization of the facts, and the preparation of recommendations for guidance of parents and teachers. These should be carried on simultaneously, as far as possible. By this we mean that, while the student is collecting information, he should make a conscious effort to scrutinize every item in regard to other factors and, by synthesis of data from every source, to form a picture of the child studied, in relation to his family background, his school, and his community setting. To do this successfully, the student should have in mind from the very outset the questions he hopes to answer at the end of his work: How well is this youngster doing, all things considered; and what will contribute to his best development?

COLLECTION OF INFORMATION BY OBSERVATION

Time available for observation is so limited that it is essential for a student to make the best use

possible of it. This can only be done by the student who has thoroughly familiarized himself with the plan of study and with the general characteristics of preschool children.

In observing a child in a group, it is not ordinarily possible to hear much of what he says, nor is it advisable to permit the observer to enter into conversation with the youngster he is studying. The shortest and safest road to just appreciation will be found through close attention to the child's activities, posture, gait, gesture, and facial expression. His appearance and movements, interests and attitudes tell much about his health and his abilities and about him as a person.

Notice the physical conditions and the make-up of the group. Identify "your" child, and watch him a few minutes without making any particular effort to study him analytically. Try instead to emulate a child's naive ability to "take in" another personality. What is interesting about him? What makes him recognizable as himself and nobody else?

Next look at this youngster as if he were a piece of "living statuary," considering proportions, contours, coloring, expression, etc. You are trying to answer the general questions: What kind of bodily equipment has he? What is his endowment of vigor and sound health? (Make record on pages 2, 3 of Workbook I.)

Your attention is next directed (pages 4, 5) to this child's activities, to what he is doing in response to the whole complex of inner and outer stimuli which are thronging in upon him. Most of us find the behavior of preschool children not only charming, even at its naughtiest, but also enlightening to a degree not to be hoped for in experiences with older children. This is not to say that the task of interpretation is simple: only that it is much simpler than it will ever be again. The most useful activity records are those made objectively, naively, with no attempt to interpret, praise, blame, or excuse. It is much more useful to record that Johnny showed no interest in Mary Jane's woes, that he grabbed every desirable toy and

sneaked out a double share of cookies than to say, "Johnny is a spoiled, selfish little boy." Let his actions speak in their well-known loud voices from your pages. This is specially important with regard to so-called character traits; on another day, in another situation, your "selfish" youngster may impress another observer as a cherub of sweet and tender generosity. The truth is, of course, that he acted, once, as you saw him; and, again, as another saw him; he is capable of both generosity and selfishness.

After you have obtained these records, if your time permits, look about you at other children in the group who are older or younger, larger or smaller than the one you are studying. Notice differences in body proportions, in posture, in contours; in the way the children walk and run, the way they use their feet and hands. Compare boys and girls. Notice which toys interest them, which are left untouched. How much do the adults have to do with the children? When is there conflict? How is it managed?

Turn your attention to the environmental situation in which this child is being seen (pages 6, 7). Here are eight, ten, twenty little people, in a somewhat restricted and familiar space, with two or three adults supervising them and perhaps five or six others standing around, trying to be inconspicuous and also trying not to show their amusement and pleasure in the presence of healthy and attractive childhood. This is hardly a "group." It is better called a "collection" of persons. Write out as simply as you can what you see happening. Perhaps a trio are in the sand box, another little group is doing stunts on the jungle gym, two girls and a boy are at the work bench, and one very young and very plump person stands staring, in what looks like tranced absorption. Then some one begins to throw sand, a climber screams loudly for all to admire his stunt, and a wandering kiddy car bumps the staring baby, who emits a wail of injured innocence.

Look at the child you are studying from this new perspective. Does he play happily with his mates, wait his turn, show enjoyment in their company? Does he choose toys and games which it takes two or more to play? How frequently does he initiate contacts with other children? How does he treat his fellows? Does he use them? Exploit them? Or is he being exploited? Does he show some glimmer of justice and mercy in his conduct?

Does he act as if he thought other persons were merely objects? Does he play alone by preference, or does he make advances to mates, only to be rebuffed, rebuffing others in his turn? You will notice that, while many little children play "alone," in one sense, you rarely or never see a child deliberately exile himself from the group. "Playing by himself in the company of others" comes nearest to describing the response of most children in preschools.

COLLECTION OF INFORMATION BY STUDY OF REPORTS OF CHILD AND GROUP

Your first-hand knowledge of this child is, of course, limited to his present. You can get some light on his past, the experiences through which he has come to be what he is today, through study of records of his early life.

Very casual reflection convinces us that a child, all by himself, is unthinkable and incomprehensible. He exists in a social group and in an environmental setting: what he has eaten and breathed has entered into his body chemistry; the winds and weather have formed him in subtle ways. These environmental factors must be taken into account for each locality and for each life history. Each child is to be described not only as an individual but as an offshoot of a family stock, as a member of various social groupings, and as a part of the fauna occurring in a given locality.

We are told by such students of childhood as Arnold Gesell that the experiences of the very earliest months of life are of great significance for later development. Pay special attention then to growth and health history from birth; to records of early success in nutritional activities, in body management, in social responsiveness, and in comprehension and use of words.

You will find much to interest you in the reports of physicians, psychologists, parents, teachers, and former students. Note these for later use in your estimation of developmental progress and adaptive success (pages 23-37). The implications of this information vary for each child; every item must be considered in terms of the child as a whole. A child can never be pigeonholed on the basis of any one measure or descriptive item. Every additional measurement and characteristic is a valuable contribution to our knowledge of him and brings us nearer an understanding of him which will be adequate as a basis for dealing with him.

Collect information as to his growth in height and weight and enter on the appropriate charts (pages 9-12). Add, chronologically, significant data with regard to the child's life, feeding, changes in routine, illness, school attendance, promotions, and others.

Estimate his status as to health (pages 14, 15). Here you must remember that 100 per cent physical fitness is not attainable by all, that good and useful lives can be lived by physically inadequate or handicapped persons. "The scars of disease are honorable scars." A definite prerequisite to making the best of one's physique is a careful estimation of assets and liabilities by skilled physicians. For most young children, given medical care and wholesome regimen, a reasonable degree of physical efficiency is attainable. The commonest health handicaps among young children are defective nutrition, lowered resistance to respiratory infections, allergies with respect to pollens, to certain foods, or to animal dust, as from cat hair or feathers. Diets that lack minerals and protective foods, inadequate exposure to sunlight produce health defects. Adequate sleep, opportunity for rest at frequent intervals, a reasonably peaceful and ordered routine of living enlivened by occasional stimulating experiences have been shown to be favorable to health and well-being.

Children of preschool age are extremely susceptible to communicable disease and often suffer serious aftereffects. Supervision of the environment and the group is imperative to protect them from the communicable diseases of childhood. It is good nursery school practice to insist on immunization of children against smallpox and diphtheria.

Early appraisement of vision and hearing is most important but very difficult. Our tests for both depend on the use of language symbols that are beyond the easy reach of preschool children. Any indication of hearing or vision defects in posture, facial expression, or social behavior should be noticed and the child referred at once to an oculist or aurist. Every child returning after illness should receive special consideration in these respects.

Children come to school from homes; no intelligent guidance of a child is possible unless we see him against the background of his family. It is not important to have extensive information as to the intimate details of family life; children grow and flourish under a wide variety of home conditions:

peaceful or warlike, secure or perilous, in poverty or wealth, in country or city or suburban surroundings. But a few simple facts about a child's home should be known and reflected on by his teachers. These include: Who make up the household? What is the father's occupation? Is the mother gainfully employed? Are there chronically ill or helpless members of the household? What sorts of yard and play space are available? Is the neighborhood residential, business, manufacturing? Near a park or playground? Near pool halls, dance halls, other undesirable commercial recreation centers? Safe as to street traffic? What are the social interests of the family? Have they church or lodge affiliation? Are there a telephone, a radio, an automobile? How do the family spend holidays? All these items gain significance in relation to the conditions obtaining in other families whose children make up the school group (page 17).

We need also to consider the school group in which a child lives and the possible influence of his superiority or inferiority with regard to the group. Any child is a different person in his actual setting from the person he might have been in any other conceivable situation. This is due partly to his kinship with the family group but also to environmental pressures and stimulations which have surrounded him from birth. The characteristics of a school population in addition to the make-up of families and neighborhoods, which must be considered in estimating the influence of the group upon the individual and his opinion of himself, include size and age range, mental-age and intelligence-quotient range, sex composition, health status, possession of special abilities and disabilities (pages 18, 19). A child is usually put at an advantage or a disadvantage when he varies widely from the median of the group in any of these respects.

To determine in which respects the child differs from the others requires observation and study of technical records; and to decide whether his differences are helping him or hindering him in making the best of himself and the situation calls for insight, patient observation, and careful reflection.

ORGANIZATION OF MATERIAL

The information assembled is now to be organized in such a way as to give improved understand-

ing concerning this child as a unified personality, making the best, or the worst, of himself. The point of view in this description should be to define more precisely the individuality of the child studied rather than to praise or blame him for his resemblances and differences with regard to the "normal" or "average" human being.

You have some information regarding his home and school and have already given some thought to what these mean for him. Try to formulate on pages 17, 19 your estimation of the influence of his home and school, the contributions which they are making to his well-being, or the ways in which they may be failing. (At the end of this chapter will be found a summary of the contributions of good nursery schools to children; contributions of homes have been discussed earlier.)

Turn back to the activity record and analyze it to find what it tells of the way the child uses his time and the characteristic traits he showed during your observation (pages 20, 21). If your record has been carefully taken, is complete and objective, what it reveals may surprise you. Snap judgments made at the time of observation have value but are inadequate in comparison with those developed as a result of reflection. With the written record before you it is possible to understand better the meaning of sequences of behavior and so to gain perspective.

Now compare the child you are studying with other children of his age. No child will meet all the specifications presented in the age-level summaries (pages 22, 24, 26, 28, 30, 32, 34). But having these summaries in mind sharpens the observer's powers of discrimination, emphasizes the salient points to be looked for, and gives a starting point for the description of the child studied.

Collect from your own report and from those reports of other students and specialists to which you have access the information bearing on the traits in which developmental progress is most strikingly shown; estimate this child's status with regard to each, as advanced, slow, or about what is ordinarily found (pages 23, 25, 27, 29, 31, 33, 35). Estimate also how successful he is as a person, taking into account his age and abilities and all you have been able to learn about him (pages 36, 37).

SUMMARY AND RECOMMENDATIONS

The plan suggested (pages 38, 39) for summarizing the study of a child follows the general

pattern of (1) describing him as an individual personality with assets and liabilities, like and unlike others of his age, (2) considering him in relation to his family stock when anything is known of this, (3) estimating his place in family, school, and play groups (4) considering the influences of his physical environment for good or ill in his life, and finally (5) estimating his success as a person, all his assets, liabilities, opportunities, and handicaps being given due weight. These statements should be brief and precise, based on evidence which is included in the body of the report but not repeating this at length.

In 6 months many changes will come to this child in the normal course of his growing older, larger, more mature, more capable. Gifts so far hidden will come to light and flaws also. To match these changes, many things in his surroundings should change and the whole pattern of his days be made richer, more flexible. To be most useful to him, these changes should be always just a little ahead of his readiness for them, quite definitely ahead of his capabilities but not so far ahead that fatigue and failure kill his natural pleasure in his growing powers. This nice timing of opportunity for exercise with the maturation of abilities calls for careful planning and forethought. Overnight, clothing and furniture are too small, playthings too simple, the backyard too narrow a world for the adventurer—yet all was well only the other day.

Keeping in mind, then, the child as he is today and the changes which will probably occur within the next few months, one can formulate recommendations to adults who are responsible for his care (page 40). Health care includes, as a minimum, medical and dental supervision, probably periodic examinations at 6 months' intervals, more frequently if indicated. It includes a hygienic regimen and sanitary environment.

Developmental needs can be forecast to some extent from his present stage of maturity. Look ahead 6 months, put yourself in the place of his parents and teachers, and plan such changes as you think will be desirable by then. Assume that this youngster continues to develop at about the same rate and in the same ways as other children do, but take into account the obvious individual differences which he shows today. For young children, equipment, time, and supervision to improve their independence in taking care of their

personal needs, as feeding and dressing themselves, etc., are of great importance. Space and equipment for developing locomotor efficiency come next. Opportunities to extend language skills, to increase social contacts, to widen acquaintance with nature are all significant. Toys may be chosen to encourage dramatic and constructive play. Trips, collections, storytelling all contribute to development.

Adaptive success of an individual is usually in proportion to the adequacy of his health care and developmental opportunities, in a setting of affection, security, and encouragement, at home and at school. A child's disposition to succeed in the important aspects of personal care, vocation, social adjustment, orientation toward self and the universe and in the development of a rich personal life is an important factor in his success or failure in these respects. Success in one aspect of adaptation does not ensure success in any other but does encourage a child to strive for success in all.

The most important recommendation here should be directed toward the framing of ideals and standards in these matters, buttressing them by examples of adults and developing faith in the ability of human beings to achieve adaptive success and a feeling of obligation to themselves and others to use this ability to the full.

The more carefully you study your information concerning the child you are observing, the more unwilling you will find yourself to "prescribe" for him. You will feel that those who know him by daily association, perhaps from his birth, are so much better informed about him than you that any suggestion from you would be an impertinence.

All this being granted, the fact remains that you have one advantage over this youngster's parents and teachers: you are in no sense responsible for him. You have therefore a freedom of mind in observing him and thinking about him which makes it possible for you to make your report useful and suggestive to his parents and teachers.

UNIQUE CONTRIBUTIONS WHICH THE NURSERY SCHOOL CAN MAKE TO THE LIFE OF THE CHILD

(Adapted from *Essentials of Nursery Education*, National Association for Nursery Education, pages 33, 34)

Homes might conceivably provide for a child certain of the desirable arrangements which a

nursery school provides. A few homes could give the child adequate indoor and outdoor space; a few homes could have well-selected play materials in sufficient quantity for the child; a few homes might include experts highly trained in the guidance of young children. It is very seldom, however, that homes do furnish children with these necessary aspects of their experiences.

There are certain factors in a child's life which can be supplied by a nursery school but which it is impossible for a home to give him:

1. The nursery school gives a child the experience of leading an independent successful life away from the familiar surroundings of home and away from the protection of his mother's presence. A child who does not have an opportunity to build up the strength to live happily part of each day without familiar protections is probably less well suited to meet the other experiences of his life than he could be.

2. A nursery school supplies a child with several (10 to 20) other children very near his own level of achievement. Social learnings of great importance which cannot be developed in any other way are possible in the company of other children of restricted age range.

3. Parents, and therefore ultimately the child, receive the benefit of consultation with individuals who understand children and how to handle children. They also have an unusually profitable opportunity to learn facts of child guidance as demonstrated in a nursery school.

Except in a few rare homes, the following contributions of the nursery school to the child's life will not be made by the home:

4. In a nursery school the child receives sympathetic, expert guidance in his growth and development from persons whose time is devoted exactly to that function throughout the day.

5. In a nursery school the child has abundant play materials adequately suited to his learning needs. Furnishings and equipment are also adapted to him at his level of development.

6. In a nursery school the child has sufficient space in which to carry out his life of exploring, learning, etc.

7. In a nursery school, as experiments have shown, a child's health is protected and promoted to an unusually successful degree.

CHAPTER VI

STUDY OF CHILD IN ELEMENTARY SCHOOL

(Use record forms in Workbook II)

CHILDREN IN ELEMENTARY SCHOOLS

Suggestions as to what modern educators consider a "good" elementary school can be gathered from recent educational literature, especially from the writings of Dewey, Rugg and Shoemaker, Marietta Johnson, and Bain, on the side of the new freedom for the young; and from Judd and others, on the side of law and order and social compulsion. The thoughtful observer who keeps in mind the goal of sound and wholesome development for children will ask of progressives and reactionaries alike: "A good school? Good for what? And for whom?" The opportunity to make this study gives the student a basis for estimation as to whether, on the particular day and for the particular group observed, modern elementary education is being "good" for teacher, pupils, parents, and community.

The elementary school as an institution differs greatly from preschool of all kinds. The observer, fresh from the preschool, is impressed by the cramped space of the elementary schools, by the greatly increased restrictions on the children's movements and vocalizations.

From the standpoint of social requirements and opportunities, the mores of most elementary classrooms run squarely counter to the tendency of children to work in small, flexible, swiftly changing groups of individuals who are helping or hindering, admiring or blaming each other. These tendencies, not present in very young children, were clearly discernible in four-year-olds; yet in many schools, the fourth grade seems to be expected to live its schoolroom hours on the social level of individual isolation which we find quite generally characteristic of two-year-olds.

From the standpoint of intellectual development, emphasis is put on acquisition of verbal skills; education by first-hand contact with things studied is relegated to outside-school hours; little opportunity is given for learning through any sense except vision.

From the standpoint of group management, there are many contrasts with the unobtrusive guidance and sheltering protection of the best preschools. Ostensibly, and in the teacher's conception of the situation, the "whole class" is carrying out one kind of activity at one time during more or less of the school day. What is actually being done by individual children while the "whole class" is thus engaged usually presents a wide variety of activities, well worth cataloguing and thinking about. It is probably true that a fairly large group of human beings, of whatever ages, is only on rare occasions fused into unified feeling, thought, and activity. Whenever this unification is accomplished in a classroom, it represents an achievement of no small magnitude on the part of the teacher. For the most part, the elementary group shows, as do the preschool children, pleasure in existing as a group and satisfaction in carrying out individual projects in company. They are increasingly capable of facilitating and hampering each other; they are also capable, for brief periods, of genuine group action, following patterns (rules of discipline, game rules, "good manners") of social conduct which become increasingly complex as the children grow more mature and more accustomed. Beating time, marching, dancing, singing constitute one series of essentially social activities. Group games, ranging from the tossing of a ball between two children to the elaborate rules of American football, illustrate increasing ability to direct and control one's own responses with reference to the behavior of others who are aiming at a common goal. Sometimes conflict between teacher and pupils becomes a group activity of absorbing interest, commanding the devotion and attention of all members of the group. This situation is rarely seen in preschools, for various reasons.

The elementary school is not to be criticized because it is different from the preschool. To duplicate the educational provision for three-year-

olds to serve ten-year-olds would be to confess serious miscalculation somewhere or else to assume our ten-year-olds were developmentally retarded. The questions to be answered are rather: Is the school situation suited to the capacities and abilities of the pupils, and is it furthering their total well-being, now and in the future? These questions can be answered, tentatively, for each child who is studied; they can be answered, still more tentatively, for the whole group by observation and study of records.

COLLECTION OF INFORMATION BY OBSERVATION

(Workbook II, pages 2-7)

In observing the child assigned to you for study, follow the same procedure as suggested for observation of the preschool child. You will notice marked differences in body contours and proportions, in skin and hair texture and coloring from the conditions generally seen in younger children. Notice particularly, as you look over the whole group, any chewing or biting of their own bodies, any restless twisting and turning. Some children in some schools remind the observer forcibly of captive animals. Others are as placidly domesticated as well-fed cows. Some are nonparticipating, aloof; others are wildly eager to be in the thick of all activity.

Behavior in the halls sometimes presents a marked contrast to schoolroom decorum; sometimes children are supervised into "good behavior" there also, and the explosion comes on the playground. In some schools, even the playtime is fully supervised and organized by adults. Notice posture, gait, expression, laughing, shouting, talking, shoving, roughhousing, in classrooms, in halls, and on playgrounds; piece together all these impressions as a background for your description of Jane or Johnny.

COLLECTION OF INFORMATION BY STUDY OF REPORTS OF CHILD AND GROUP

(Workbook II, pages 8-14)

Make full use of such records of medical and psychological examinations as you can find. The growth and health history of a ten-year-old child is long enough to carry many interesting implications; look especially for possible connections between school difficulties in the first 2 years and communicable-disease history, or reports of

defects of vision and hearing. Times of unusually rapid gain in height or weight should be noted in relation to the child's performances: a slowing down or complete failure to gain during the first year of school life is sometimes found and may give some indication of the child's reaction to his new experiences.

Remember that 100 per cent physical fitness is not attainable by all, that good and useful lives can be lived by physically inadequate or handicapped persons. "The scars of disease are honorable scars." A definite prerequisite to making the best of one's physique is a careful estimation of assets and liabilities by skilled physicians. For most children, given medical care and wholesome regimen, a reasonable degree of physical efficiency is attainable. The commonest health handicaps at the elementary school age are defective nutrition, dental defects, infected tonsils and adenoids, defects of vision and hearing. Children in this age group are extremely susceptible to communicable disease and suffer serious aftereffects. Supervision of the environment and the group is imperative to protect them from the communicable diseases of childhood. Immunization is effective in the case of a few diseases.

The intelligence tests we now have are generally recognized as most useful at the elementary school level. Results are more consistent than with younger children; intelligence quotients may be calculated for these ages with greater propriety than for older children. The relation of native learning ability, as indicated by tests and otherwise, to family background, school achievement, special interests, social responses sheds valuable light on the child considered as a whole.

Any child's school history may be looked at with the certainty that the rows of marks, the count of absences, and notations on promotions or nonpromotions are mute testimony as to events which were of extraordinary importance in the child's own mind, and usually in the estimation of his parents. In practically all cases, much greater importance was assigned to them than the accuracy of teachers' judgments warrants. We have in these brief annals the record of those dreaded "report cards," for which Johnny has been praised, blamed, "treated," paid, whipped, deprived, consoled, discouraged—as the case and the family habit may dictate. The one thing we can be sure of is that there were reactions, plenty of them, and

vigorous ones. Johnny today carries the memory of all those experiences.

Children come to school from homes; no intelligent guidance of a child is possible unless we see him against the background of his family. It is not important to have extensive information as to the intimate details of family life; children grow and flourish under a wide variety of home conditions; peaceful or warlike, secure or perilous, in poverty or wealth, in country or city or suburban surroundings. But a few simple facts about a child's home should be known and reflected on by his teachers. These include: Who make up the household? What is the father's occupation? Is the mother gainfully employed? Are there chronically ill or helpless members of the household? What sort of a yard and play space is available? *Is the neighborhood residential, business, manufacturing?* Near a park or playground? Near pool halls, dance halls, other undesirable commercial recreation centers? Safe as to street traffic? What are the social interests of the family? Have they any church or lodge affiliation? Are there a telephone, a radio, an automobile? How do the family spend holidays? All these items gain significance in relation to the conditions obtaining in other families whose children make up the school group.

We need also to consider the school group in which a child lives and the possible influence of his superiority or inferiority with regard to the group. Any child is a different person in his actual setting from the person he might have been in any other conceivable situation, this partly because of his kinship with the family group but also because of environmental pressures and stimulations which have surrounded him from birth.

The characteristics of a school population in addition to the make-up of families and neighborhoods, which must be considered in estimating the influence of the group upon the individual and his opinion of himself, include size and age range, mental-age and intelligence-quotient range, sex composition, health status, possession of special abilities and disabilities. A child is usually put at an advantage or a disadvantage when he varies widely from the median of the group in any of these respects. To determine in which respects the child studied differs from the others requires observation and study of technical records; and to

decide whether his differences are helping him or hindering him in making the best of himself and the situation calls for insight, patient observation, and careful reflection.

ORGANIZATION OF MATERIAL

(Workbook II, pages 13-29)

The information assembled is now to be organized in such a way as to give improved understanding concerning this child as a unified personality, making the best, or the worst, of himself. The point of view in this description should be to define more precisely the individuality of the child studied rather than to praise or blame him for his resemblances and differences with regard to the "normal" or "average" human being.

You have some information regarding his home and school and have already given some thought to what these mean for him. Try to formulate on pages 13, 15 your estimation of the influence of his home and school, the contributions which they are making to his well-being, or the ways in which they may be failing.

Turn back to the activity record and analyze it to find what it tells of the way he uses his time and the characteristic traits he showed during your observation, (pages 16, 17). If your record has been carefully taken, is complete and objective, what it reveals may not agree with your first impressions. Snap judgments made at the time of observation have value but are inadequate as compared with those developed as a result of reflection. With the written record before you it is possible to understand better the meaning of sequences of behavior and so to gain perspective.

Now compare the child you are studying with other children of his age. No child will meet all the specifications presented in the age-level summaries (pages 18, 20, 22, 24, 26). But having these summaries in mind sharpens the observer's powers of discrimination, emphasizes the salient points to be looked for, and gives a starting point for the description of the child studied.

Collect from your own report and from those reports of other students and specialists to which you have access the information bearing on the traits in which developmental progress is most strikingly shown; estimate this child's status with regard to each, as advanced, slow, or about what

is ordinarily found (pages 19, 21, 23, 25, 27). Estimate also how successful he is as a person, taking into account his age and abilities and all you have been able to learn about him (pages 28, 29).

SUMMARY AND RECOMMENDATIONS

The plan suggested (pages 30-32) for summarizing the study of a child follows the general pattern of (1) describing him as an individual personality with assets and liabilities, like and unlike others of his age, (2) considering him in relation to his family stock, when anything is known of this, (3) estimating his place in family, school, and play groups (4) considering the influences of his physical environment for good or ill in his life, and finally (5) estimating his success as a person, all his assets, liabilities, opportunities, and handicaps being given due weight. These statements should be brief and precise, based on evidence which is included in the body of the report but not repeating this at length.

In 6 months many changes will come to this child in the normal course of his growing older, larger, more mature, more capable. Gifts so far hidden will come to light and flaws also. To match these changes, many things in his surroundings should change and the whole pattern of his days be made richer, more flexible. To be most useful to him, these changes should be always just a little ahead of his readiness for them, quite definitely ahead of his capabilities but not so far ahead that fatigue and failure kill his natural pleasure in his growing powers. This nice timing of opportunity for exercise with the maturation of abilities calls for careful planning and forethought.

Keeping in mind the child as he is today and the changes which will probably occur within the next few months, one can formulate recommendations to the adults who are responsible for his care. **Health care** includes, as a minimum, medical and dental supervision, probably periodic examinations at 6 months' intervals, more frequently if indicated. It includes a hygienic regimen and sanitary environment.

Developmental needs can be forecast to some extent from his present stage of maturity. Look ahead 6 months, put yourself in the place of his parents and teachers, and plan such changes as you

think will be desirable by then. Assume that this youngster continues to develop at about the same rate and in the same ways as other children do, but take into account the obvious individual differences which he shows today.

Determination of reading readiness is important for children entering those grades where learning to read is expected of all. In modern schools, this is often not expected until the third grade but is encouraged informally for the children who are ready for it earlier. There are many school failures in the first grade, where developmental level has not been considered in planning school experiences for each child. Difficulties in arithmetic are probably due in part to attempting this kind of work before the children are mature enough to carry it on successfully. Penmanship, drawing are often poor in bright children whose intellectual capacities have outstripped motor coordination.

Close friends begin to be very important at these ages. Hobbies, special interests take form and become engrossing; parents and teachers must sympathize, provide equipment and time for them, and respect these enterprises for their usefulness to the child's self-knowledge and self-respect.

Reading for pleasure takes a large place in the lives of some children. They will read practically anything which comes under their eyes; recommendations of useful book lists for these ages can be had from local libraries. Without guidance, many children read omnivorously but not profitably.

Adaptive success of an individual is usually in proportion to the adequacy of his health care and developmental opportunities, in a setting of affection, security, and encouragement, at home and at school. A child's disposition to succeed in the important aspects of personal care, vocation, social adjustment, orientation toward self and the universe, and in the development of a rich personal life is an important factor in his success or failure in these respects. Success in one aspect of adaptation does not ensure success in any other but does encourage a child to strive for success in all.

The most important recommendation here should be directed toward the framing of ideals and standards in these matters, buttressing them by examples of adults and developing faith in the ability of human beings to achieve adaptive success, and a feeling of obligation to themselves and others to use this ability to the full.

The more carefully you study your information concerning the child you are observing, the more unwilling you will find yourself to "prescribe" for him. You will feel that those who know him by daily association, perhaps from his birth, are so much better informed about him than you are that any suggestion from you would be an impertinence.

All this being granted, the fact remains that you have one advantage over this youngster's parents and teachers: you are in no sense responsible for him. You have therefore a freedom of mind in observing him and thinking about him which makes it possible for you to make your report useful and suggestive to his parents and teachers.

CHAPTER VII

STUDYING YOUTH IN SECONDARY SCHOOL

(Use record forms in Workbook III)

It is assumed that the student will have the opportunity to visit a secondary school of junior or senior high school grade and watch a designated pupil working and playing in several classes and in various social situations. He will also have a chance to study the school plant, notice class management and extraclass activities, and make the acquaintance of a few members of the school staff.

In addition to this first-hand observation, the student will have access to a set of recorded observations concerning the pupil he is studying. These will include reports on health, growth, school history, family background as well as the technical records of physician and psychologist. Usually there are also the pupil's reports on his own activities and observations made by previous students to whom this pupil has been assigned. There are also available a description of the school population and a statement of school policies in regard to curriculum, health and other services, and social activities.

This mass of information and opinion is often more extensive, confusing, and inconsistent within itself than similar material obtained at earlier ages. Care in making first-hand observations, patience and accuracy in assembling data, and a good deal of skepticism as to opinions, his own included, are all important as elements in the student's success in grasping the various aspects of a pupil's personality.

The study of a child includes three operations: the collection of information, the organization of the facts, and the preparation of recommendations for guidance of parents and teachers. These should be carried on simultaneously, as far as possible. By this we mean that, while the student is collecting information, he should make a definite effort to synthesize all the various items from every source to form a picture of the child studied, in relation to his family background, his school, and his community setting. The student should have

in mind from the very outset the questions he hopes to answer at the end of his work: How well is this youngster doing, all things considered? And what will contribute to his best development?

COLLECTION OF INFORMATION BY OBSERVATION

Time available for observation is so limited that it is essential for a student to make the best possible use of it. This can be done only by the student who has thoroughly familiarized himself with the plan of study and with the general characteristics of youth.

In observing a pupil in a group, it is not ordinarily possible to hear much of what he says, nor is it advisable to permit the observer to enter into conversation with the youngster he is studying. The shortest and safest road to just appreciation will be found through close attention to the pupil's behavior, his posture, gait, gesture, and facial expression. His appearance and movements, interests and attitudes tell much about his health and his abilities and about him as a person. Consider his proportions, contours, coloring. From all this comes an answer to such general questions as: What is interesting about this youngster? What makes him different from all the rest? What kind of impression does he make on a stranger (pages 2, 3)?

Your attention is next directed (pages 4, 5) to the child's activities, to what he is doing in response to the whole complex of stimuli arising from his surroundings, from his fellow students, from his teachers, and from within himself. Samples of records of high school pupils are given in the studies of children in secondary schools (pages 87-101, 108-131). Their activity is rarely easy to interpret. It becomes more intelligible when considered in relation to other information available in the pupil's history.

After you have obtained these activity records, look about you at other pupils in the group who are older or younger, larger or smaller than the one

you have been watching. Notice differences in body proportions, in posture, in contours; in the way they walk, the way they use their feet and hands. Compare boys and girls in these and other respects.

Sometimes a whole class shows a united front, in which the teacher is included; in other situations the teacher is excluded. Occasionally we find that one or more pupils is an obvious outsider, though present in body. Experimental investigations have shown the helpful influence of the presence of others on the achievement of most young people. The "outsiders" do not reap this benefit, and their presence often interferes with group facilitation for anyone. When the class is united against the teacher, antagonistic activities are facilitated but not constructive learning.

Again a class may appear as a collection of individuals without common purposes. Such groups often appear bored, waiting for the period to end. Much senseless activity, as chewing pencils, biting fingers, dressing hair, often occurs among these groups and is also characteristic of the "outsiders" in an otherwise well-integrated group.

The teacher's skill in holding the group as a group, nevertheless giving some attention to individuals, is an important element in any class situation. It counts for less in secondary school than in elementary, since class groups exist for such a brief time, generally less than an hour. A new class may offer a better or a worse atmosphere of cooperation, competition, or boredom. It is important to see any pupil in at least two classes.

Opportunity to observe a pupil in the halls, the lunch room, the library, a club meeting, or on the playground is most valuable. Marked differences in gait, posture, expression, voice, and general behavior often appear under these circumstances. Such additional observation helps to correct in a measure the inadequacies of classroom activity records (pages 6, 7).

COLLECTION OF INFORMATION BY STUDY OF RECORDS

(Workbook III, pages 8-14)

The records of a pupil observed in high school include his school record of marks, promotions, and attendance from kindergarten on. These are accompanied by his health and growth record and his test record. No specific and unvarying relationship can be found between these records.

But experience shows that no one of these items can be estimated as to its significance for the person's whole make-up and future prospects unless considered in regard to the others. It is not uncommon to find pupils with average or slightly better than average intelligence-test scores who receive better marks, attain higher scores in reading and arithmetic tests than do certain pupils whose intelligence-test scores are distinctly higher. "Laurie" (pages 87-93) presents a case where school achievement is definitely lower than ability and home advantages would lead us to expect; "Angelina" (pages 125-131), on the other hand, with a lower-than-average I.Q. and a language handicap, has made good school progress. Periods of rapid growth in height frequently seem to be accompanied by lowered resistance to respiratory infections, consequent absenteeism and disorganization of school work. Periods of rapid gain in weight apparently do not carry these disadvantages.

In interpretation of observations and records of high school pupils, keep in mind the possible bearing of very rapid growth, of recurring minor ailments, and of defective vision and hearing. Difficulties in early school life, as shown in the elementary school history, may mean a handicap in high school, especially in ability to read, write, and handle "simple" arithmetic. Early school records may also help to account for attitudes toward school work at present.

Reading disabilities are a serious handicap and are by no means confined to the dull. Freshman classes in college have been found to show a range in reading skills from the third-grade level to the level of the superior adult. The same probably holds for arithmetic skills, which are not closely related to mathematical insight or to other kinds of academic ability; but these skills have not been so carefully studied at the college level. Both reading and arithmetic skills may be influenced by defective vision or hearing; but this does not mean that all such disabilities are accounted for by eye and ear defects. Nor will the removal of these defects serve to cure the disabilities. It is important in this connection to notice what provision, if any, has been made by school or home to discover the pupil's difficulties, to give him training for their removal, and to consider his limitations in passing judgment on his school performances.

Vocational ambitions and choices are now of immediate practical concern to most of these

children and to their parents and counselors. Any opportunity reported by the pupil for experience in earning, spending, and saving money is important in this connection. Any reports of first-hand acquaintance with some of the ways in which men and women of the locality earn their living are significant evidence of the pupil's vocational progress.

Relationships with other human beings, including responses to them and from them, come to have increased significance at the secondary level. Changes include a widening of the circle of friends and acquaintances. Records of club and lodge memberships, church affiliations, and reports on how week ends and other free days are spent give some light on these changes. Records tell little of the development of interest in the opposite sex, though some hints may be got by observation. This interest may be generalized, or it may be concentrated on one person.

Estimate his status as to health. Here you must remember that 100 per cent physical fitness is not attainable by all, that good and useful lives can be lived by physically inadequate or handicapped persons. "The scars of disease are honorable scars." But a definite prerequisite to making the best of one's physique is a careful estimation of assets and liabilities by skilled physicians. For young people, given medical care and a wholesome regimen, a reasonable degree of physical efficiency is attainable by all but a very few unfortunates. Common health handicaps at this age are defective nutrition and frequent respiratory infections. Diets lacking in minerals and in protective foods, inadequate exposure to sunlight produce health defects. Adequate food and sleep, opportunity for rest, a reasonably peaceful and orderly routine of living enlivened by stimulating experiences will contribute to health and well-being. The student of secondary school age may need more sleep and rest than his younger relatives in elementary school.

Defects of vision and hearing are more common than in earlier years but are more readily recognized and corrected. Communicable diseases of childhood are low in incidence, but there are still a good many respiratory and digestive disturbances. Supervision of environment and group is still important in prevention of illness. Pupils can, however, learn to understand their own problems and to protect themselves, to a degree not possible or desirable in earlier age groups.

Children come to school from homes; no intelligent guidance of a child is possible unless we see him against the background of his family. It is not important to have extensive information as to the intimate details of family life; children grow and flourish under a wide variety of home conditions: peaceful or warlike, secure or perilous, in poverty or wealth, in country or city or suburban surroundings. But a few simple facts about each child's home should be known and reflected on by his teachers. These include: Who make up the household? What is the father's occupation? Is the mother gainfully employed? Are there chronically ill or helpless members of the household? What sort of a yard and play space is available? Is the neighborhood residential, business, manufacturing? Near a park or playground? Near pool halls, dance halls, other undesirable commercial recreation centers? What protection is there from street traffic? What are the social interests of the family? Have they any church or lodge affiliation? Are there a telephone, a radio, an automobile? How do the family spend holidays? All these items gain significance in relation to the conditions obtaining in other families whose children make up the school group.

We need to consider the school group in which a child lives and the possible influence of his superiority or inferiority with regard to the group. Any child is a different person in his actual setting from the person he might have been in any other conceivable situation, partly because of his kinship with the family group but also because of environmental pressures and stimulations which have surrounded him from birth. A pupil is usually placed at an advantage or a disadvantage when he varies widely from the median of the group in any one of several respects, including size, age, health, special abilities and disabilities. On pages 159-168 will be found a description of a junior high school population and an estimation of its probable influence on its members.

ORGANIZATION OF MATERIAL

(Workbook III, pages 13-33)

No general rules can be given for interpreting this material. Study of any pupil's record, if this is even fairly complete, raises more questions than it answers. But the observer gains in sympathy, in understanding, in capacity to identify himself

with the child studied by living through in his imagination the experiences, the achievements, and the failures which these life histories recount. This feeling of kinship, of acceptance of the other's personality as his life has made and revealed it is generally recognized to be essential as a foundation for wholesome relationships. Developing this basis by studying a few individuals objectively and carrying over the resulting attitudes to relationships with the many others who have not been studied is the method advocated here, especially for teachers who must deal with large and shifting groups of children and parents.

The information assembled by the student is now to be organized in such a way as to improve understanding concerning this child as a unified personality, making the best, or the worst, of himself. The purpose in this description is to define more precisely the individuality of the child studied rather than to praise or blame him for his resemblances and differences with respect to the "normal" or "average" human being.

You have some information regarding his home and school and have already given some thought to what these mean for him. Try to formulate on pages 13, 15 your estimation of the influence of his home and school, the contributions which they are making to his well-being or the ways in which they may be failing. (See Chapter VIII for suggestions as to the influences of schools on children.)

Turn back to the activity record and analyze it to find what it tells of the way he uses his time and the characteristic traits he showed during your observation (pages 16, 17). If your record has been carefully taken, is complete and objective, what it reveals may surprise you. Snap judgments made at the time of observation have value but are inadequate as compared with those developed as a result of reflection. With the written record before you it is possible to understand better the meaning of sequences of behavior and so to gain perspective.

Now compare the child you are studying with other children of his age. No child will meet all the specifications presented in the age-level summaries (pages 18, 20, 22, 24, 26, 28, 30). But having these summaries in mind sharpens the observer's powers of discrimination, emphasizes the salient points to be looked for, and gives a starting point for the description of the child studied.

Collect from your own report and from those reports of other students and specialists to which you have access the information bearing on the traits in which developmental progress is most strikingly shown; estimate this child's status with regard to each, as advanced, slow, or about what is ordinarily found (pages 19, 21, 23, 25, 27, 29, 31).

At the secondary school level certain aspects of development are of more interest to the youth himself and are more clearly shown to the observer than is the case in younger children. During their high school days many students feel a definite heightening of interest in aesthetic satisfactions, such as those derived from the arts of music, drawing, sculpture, literature, dramatics. Others find keen delight in craftsmanship of many sorts. Still others discover a fascination in abstract thought and in independent investigations in many fields. It is safe to say that all, bright or dull, cultivated or crude, are at some time during these 6 years somewhat puzzled about themselves, the civilization of which they are becoming aware, and the universe of which they feel themselves a disconcertingly unimportant fragment.

How are these developing traits and increasing progress in orientation to be recognized? Records of a child's interest and participation in dramatics, in glee and choral, in school journalism may give some clues. Awakening intellectual interests are most clearly shown in social studies, science and mathematics classes, especially where the school encourages free discussion and individual projects. Evidence of orientation to human society, and to the totality of things comes out in discussions on ethics and religion. These are not a part of school records. The observer finds himself in the position of having no direct information about the most basic and vitally important aspects of the person he is studying. This should lead to modest rather than dogmatic conclusions. There are, however, some indirect sources of evidence, not conclusive but suggestive. From early childhood, carriage of the body and facial expression convey some indication of a person's understanding of and feeling about himself and his surroundings. Senseless movements often indicate defective orientation or feelings of inadequacy which may or may not be justified. Shyness or its opposite, undue self-assertiveness, talkativeness also testify to uncertainty about oneself and one's relation to the whole scheme of things.

At the secondary level especially, youngsters may give more direct evidence of their judgments and information about themselves and the society in which they are to live. Writing, taking part in discussions, choice of books to read, choice of activities, church membership all give some hints of adequacy of orientation. In addition, any observer can see for himself that interest in and response to one or a few other human beings has become greatly intensified in many of these young people. Certainly to some of them, during certain periods of time, the presence of some one person is the one supreme reality of which they are conscious and to which they respond; all others have a ghostly ineffectiveness as sources of stimulation. This overwhelming experience is inadequately recognized in ordinary speech by saying the youngster has a "crush" or a "case" on someone.

Time spent at home is even more fully dominated by school interests than during the years from 6 to 12. Studies of use of out-of-school time by young people (pages 52-54) have shown, however, that both boys and girls spend a good many hours in work at home, helping to buy, prepare, and serve food, to clean house, wash and iron; taking care of the car, the radio, the dog, cat, chickens, etc. Typically, more time is spent on personal care and grooming during the latter half of this period; and more time is thus spent by girls than by boys. But on the whole, the adolescent's day and work are in equally sharp contrast to the little child's program and to the routine of the adult. He spends less time on all forms of life maintenance, has more time for and interest in life enrichment

then he has ever had before or will, in most cases, ever have again. No wonder he finds himself very busy; he has so many possibilities to explore that no day is long enough for him.

Adaptive success of an individual is usually in proportion to the adequacy of his health care and developmental opportunities, in a setting of affection and security and encouragement at home and at school. But it must be recognized that a human being's disposition to succeed in the important aspects of personal care, vocation, social adjustment, orientation toward self and the universe, and in development of a rich personal life is an important factor in his success or failure in these respects. Success in one aspect of adaptation does not ensure success in any other but does encourage a child to strive for success in all (pages 32, 33).

The recent study of the problems of American youth as seen by themselves, made by the American Youth Commission (*Youth Tells Its Story*) shows that young people are thoughtfully and earnestly, almost desperately concerned with their own successful adaptation to their situation. The quotation in the paragraphs that follow presents a summary of the findings of this study in answer to the questions: "What are your own personal problems? What constitutes the 'youth problem' in general?"

Although there is a clear-cut tendency on the part of young people to emphasize the lack of economic security as the most serious problem confronting their generation, it can hardly be assumed that there is a monotonous uniformity in either their interpretations of the problem or the suggestions they offer for its possible solution.

Youth's Own Statement

Youth's own problem		Youth problem in general	
Type of problem	Percentage of youth	Type of problem	Percentage of youth
Economic security.....	66.6	Economic security.....	57.7
Education, vocational choice.....	18.1	Conduct or morals.....	11.1
Home.....	9.0	Education, vocational choice.....	10.6
Personality adjustment.....	3.2	Home.....	7.1
Social relations*.....	2.6	Recreation.....	4.9
Other.....	5.5	Other.....	8.6
Total.....	100.0	Total.....	100.0
Number of youth stating problem.....	9,414	Number of youth stating problem.....	8,111

* Social relations with the opposite sex.

On no question did we get such a wealth of varied and colorful comments. Our space will permit the presentation of only a fraction of their spontaneous expressions of opinion.

"Getting jobs is the main problem. Employers want experienced people, and I don't see how you can get experience if they won't give you a job." . . .

"No work . . . no money . . . no good education . . . no good times . . . these are the problems that young people have to face." . . .

"The problem is how to get married on \$15 a week." . . .

"It used to be you could get a job anywhere, but now you can't hardly buy one." . . .

"A fellow wants to have a good time and have a little spending money. You go crazy if you hang around the same block with nothing to do. Work is the only solution. How you get it, I don't know." . . .

"Sex education is a big problem in the life of any youth, and I think such education should begin as soon as the child is old enough to understand." . . .

"Girls worry too much about love." . . .

"Social relations with opposite sex is the main problem. If you love a girl and she don't love you, it's awful." . . .

"They ought to have a course in school on how to go about getting a job. One ought to know how to approach an employer, how to ask for a job, and where to look for it." . . .

"When youth want to quit school, let them quit and don't force them to go. It drives me nuts to sit in school when you are not learning anything." . . .

"Everybody should have a chance to take a college education. The more education you get, the better you are able to face life." . . .

"Young people stop school too soon because parents can't afford to keep them there. A provision should be made to allow them to go through at least high school."

As youth themselves see it, the "youth problem" is largely a matter of economic security. In many respects, their conception of the basic problems that confront their generation has been reflected in the conclusions that have been set down in various sections of this report.

It seems to us, as apparently it seems to them, that the most pressing problems, involving the need for the most vigorous social action, fall into three general areas:

1. Employment. For hundreds of thousands of youth in America, this means getting a job. For as many others, it means a wage that will provide both an acceptable standard of living and an opportunity to provide for future years.

2. Education. For large numbers who have been forced out of school for economic reasons, this means the creation of a less fictitious equality of opportunity, and, for many others who are still in school, it means an

educational program that is more clearly in harmony with their interests and needs.

3. Recreation. For no less than millions of young people in America, this calls for an awakening, on the part of communities, to the social as well as the personal values of healthful and satisfying recreation, and a determination to develop leisure-time programs that will not only absorb energies that often lead to delinquent behavior, but which will add something valuable to the spiritual stature of those who participate in them.

Although dependency is the bugbear of youth in youth's own eyes, untimely death from accident and from communicable disease, especially tuberculosis, can justifiably be regarded as the most serious, complete, and irremediable of all youthful failures in adaptation. But to social workers and to most socially conscious adults, failure to maintain essential social conformity to the degree recognized as juvenile delinquency seems even more tragic than death itself. This is not true if there is a chance that the delinquent may be restored to law-abiding citizenship and social usefulness. However, there is enough truth in the statement that "of the Four D's: Disease, Death, Dependency, Delinquency, the worst is Delinquency" to make all who love children seek earnestly to prevent their falling into lawbreaking. Homes and schools share blame for a youth's downfall; it is certain that a baby is not born a lawbreaker but achieves lawbreaking.

That this is peculiarly a problem of the secondary level is generally recognized. A recent study* in New Jersey shows that the delinquents themselves place more blame on their school experiences than on their home background.

Sixteen is the age which, in proportion, contributes more to serious crime than any other. The age period sixteen to twenty outstrips all others and of this sixteen stands first, seventeen second, eighteen third, and so on.

A great many of the young offenders said that they were not understood at home but beyond that they attached little if any "blame" for their plight to their families.

More than half of these youths had been no better than fair in school; more than half noted trouble with their teachers. Seventy per cent of the older group felt that teachers had been unfair to them. Two out of three had been excessive truants. Over half the truants had

* Plant, James S., M.D. (director Essex County Juvenile Clinic, Newark, N. J.), New Jersey Looks at Its Young Delinquents. *Survey*, Midmonthly, Journal of Social Work, September, 1938, vol. 74, No. 9, pp. 278-279.

been taken to court on that account and more than a third were first placed in an institution because of truancy. Some of the best passages of the commission's report discuss the responsibility of the school toward the real needs of unacademic children and challenge the common sense of treating truancy with institutionalization.

In the frustration of the child's development and in the provision of an environment from which the delinquent is vigorously trying to escape, the school stands out as the agency primarily responsible.

Our hope for the reduction in delinquency lies in every sort of "pre-court" community service but most easily and efficiently in the realm of school adjustment.

These statements stir in all who are responsible for schools new interest in the older boys and girls, no longer restless, awkward, mischievous, but also no longer frank, open, easily approached. Attendance and disciplinary records, school failures gain fresh importance as recognized precursors of law-breaking. To these unfortunates, school has brought a sense of injustice and frustration; not all children can learn all school tasks, but no child need be forced to learn this bitterness.

SUMMARY AND RECOMMENDATIONS

The plan suggested (pages 34-36) for summarizing the study of a child follows the general pattern of (1) describing him as an individual personality with assets and liabilities, like and unlike others of his age, (2) considering him in relation to his family stock, when anything is known of this, (3) estimating his place in family, school, and play groups, (4) considering the influences of his physical environment for good or ill in his life, and finally (5) estimating his success as a person, all his assets, liabilities, opportunities, and handicaps being given due weight. These statements should be brief and precise, based on evidence which is included in the body of the report but not repeating this at length.

Having in mind the child as he is today and the changes in him and in demands made on him which will probably occur within the next few months or years, one can formulate recommendations for the guidance of those responsible for him, including himself.

Health care includes, as a minimum, medical and dental supervision, probably periodic examinations at 6 months' intervals, more frequently if

indicated. It includes all aspects of a hygienic regimen and a sanitary environment.

Developmental needs can be forecast to some extent from his present stage of maturity. Look ahead 6 months, put yourself in the place of his parents and teachers, and plan such changes as you think will be desirable by then. Assume that this youngster will continue to develop at about the same rate and in the same ways as others do, but take into account the obvious individual differences in pace and in emphasis which he shows today.

Adaptive success is more within the scope of influence of school and home than are health, growth, and development. Human beings depend to such an extent on intelligent functioning for adaptive success that education and nurture have their golden opportunity in this connection. It should not be forgotten that youngsters, by virtue of being human, have great powers of adaptation, in which we and they can place full faith.

The most important recommendation here should be directed toward the framing of ideals and standards in these matters, buttressing them by examples of adults. It is also important to develop faith in the ability of human beings to achieve adaptive success and to stir in young people a feeling of obligation to themselves and others to use this ability to the full.

In considering recommendations for the boy or girl you have studied, you will recognize many more limitations than those that confronted you in dealing with younger children. Some of these limitations arise from the fact that a good many years of this person's life have been lived, with irreversible consequences to body and spirit; other limitations grow out of the difficulty of the economic situation, since the opportunities needed by the boy or girl in this age group for health, education, recreation, social development involve family status and expenditures to a much greater degree than with younger children. A further serious limitation is the fact that important decisions have to be made by or for the secondary school boy or girl, and chances for trial-and-error exploration are rather limited. The time to do the best possible by a youth is long before he comes into his teens; this trite statement gains new force and meaning for the observer who tries to frame suggestions for a sixteen-year-old.

The student has, however, an asset in the adolescent's greatly improved ability to understand

his own situation and in his increasing independence of action. He can be given information about his own bodily assets and liabilities and can, within his financial limits, do a good deal to improve his situation in this respect. He can study his own school record and test scores and learn what he can reasonably expect of himself. More important vocationally and avocationally than all this, he can be helped to discover his own special skills and interests and to capitalize these. He can understand the importance of personal independence and be encouraged to learn to earn and to spend money, to make a wide circle of acquaintances and a few friends, to take every legitimate opportunity for travel and new experiences. New forms of recreation mean new facets of experience, often new acquaintances. Intelligent selection of moving pictures and pleasure reading can widen his horizon and enrich his sympathies.

With all this, which is designed to free the youth from the confines of childishness and to enlarge his experience and just self-esteem, there is need for establishment and recognition of new controls to take the place of the ones he is discarding. Society has not been as successful in developing self-control in youth as in the other half of its task of providing for the full development of an adolescent. With self-knowledge there arises self-respect, which has been shown to be a strong factor in self-control. All human beings depend to some degree on social support to help them carry out their good intentions of self-control. This support can be got by youth in part by his membership in "gangs," "cliques," or more formally organized groups, with established standards of loyalty and mutual aid.

It is obvious that educational recommendations which are directed only at enrichment and development of the individual are assuming that social responsibility and loyalty will develop automatically. The large number of juvenile delinquencies occurring typically between school-leaving age and the age of entering industry indicate the contrary. On the whole, schools do better by youth while they are in school than does the community after they have left school. Recommendations should consider ways and means of bridging the gap between school and the time when the young person is "settled" in a job, with an established political and religious philosophy and a code of behavior, ready to make a new home.

An important suggestion for younger children was a careful appraisal, to be made by experts and understood by parents and teachers. At the end of the secondary school period a new appraisal is essential, to be interpreted by a skilled person to the parent and the school and also to the youth himself.

The more carefully you study your information concerning this youth, the more unwilling you will find yourself to "prescribe" for him. You will feel that those who know him by daily association, perhaps from his birth, are so much better informed than you that any suggestion from you would be an impertinence.

All this being granted, the fact remains that you have one advantage over this youngster's parents and teachers: you are not directly responsible for him. You have therefore a freedom of mind in observing him and thinking about him which makes it possible for you to make your report useful and suggestive to his parents and teachers.

CHAPTER VIII

STUDIES OF A HIGH SCHOOL POPULATION IN A SCHOOL ENVIRONMENT

A secondary school population is ordinarily much less homogeneous in every way than is that of an elementary school in the same community. A child finds himself no longer a member of Miss Jones's class of 35 or 40 children, all about the same age, living in the same neighborhood, with a classroom of their own as a school home. He is in a much larger group, taught by several different teachers during the day; often the only place that he can call his own in the whole school plant is a cubbyhole in the hall.

In many parts of the country, children of the well-to-do and of the very poor, white, Negro, oriental all pour into high school together. The child, rapidly transforming into the adolescent, is much concerned with "placing" himself and his family in his own estimation and in the estimation of his associates. The social characteristics of the student population of any secondary school exert a real and significant influence on every student individually and on the families whose children make up the student body. School authorities need to know the sociological facts concerning their whole group of pupils in order to be just in their estimate of any one pupil's reactions. The kinds of information necessary and useful for this purpose have not been finally determined, either theoretically or practically.

Studies of two high school populations which are given here (pages 163-176) include material readily available in any public school, which helps the observer understand the problems faced by a pupil member of one of these "populations" when he undertakes to place himself and his family, to underpin his feeling of worth and importance with the solid facts concerning his own likeness and difference, his belonging to a minority or a majority group, his being more or less fortunate in endowment of health and brains, in family background, in security and opportunity.

ESTIMATION OF INFLUENCE OF SCHOOL: AGE, GEOGRAPHIC RANGE, MENTAL ABILITIES, CLASSIFICATION: Wilson Junior High School

First comes the student's position as to age, shown by placing him on the age-grade table (page 163). This table shows that the school population of the school under observation is as a whole slightly accelerated in grade for age, more pupils being younger than average for their grade than are older. The list of elementary schools from which pupils have come (page 163) shows that the bulk of the group has come from nearby schools, but a considerable minority come from widely scattered communities and would at first be "outsiders" in a maze of closely knit groups. These pupils would in some cases have had wider experiences and would bring potential enrichment to the experience of their mates. In some parts of the country, school populations contain a much larger proportion of "floating population" than does the school studied here. There is no doubt that such facts as these need to be ascertained and taken into account.

Even more important than age and geographic range of pupils is the make-up of the group in terms of intelligence quotient and reading skill. These tables (page 164) are based on the results of a specified list of tests and have only the validity which these tests possess. The range in mental age is wider than in chronological age and is greatest of all in reading age. On the basis of all these measures, the children are nearer together when they enter the low seventh grade than when they leave the high ninth. The compulsory school age in the state in which this school is situated is 16; the student body probably represents a fair sampling of the youth of the community, with a slight preponderance of the more favored.

How are these students, of such varying academic ability, arranged in groups? Few secondary

schools use test results as a basis for classification, as is often done in elementary schools. This school gives the entering children a semester to get acquainted with each other, then places each pupil in the same class as his best friends, as far as possible. This basis of selection does not result in classes which are uniform in age, I.Q., reading age, height, weight, or any other trait. It does satisfy the pupil's interest in group activity and provides a basis of mutual aid, tolerance, and understanding on which the teacher may depend for class solidarity. The cooperation of students in the conduct of school affairs, as described, gives some evidence as to how well this plan is working. But a child who is not liked might find himself in a more painful situation than in a school organized on some formal plan of classification. Truancy or nonparticipation in school affairs probably should be interpreted very differently here from similar individual behavior in a different type of secondary school with less social stimulation, less attention to the individual pupil.

ESTIMATION OF INFLUENCE OF SCHOOL: HEALTH AND ATTENDANCE

Supervision of health of the student population is an important factor to be taken into account in estimating what a pupil's school life does or can mean for his whole development and welfare. The two most important elements are the availability of trained medical and nursing service and the disposition of school authorities to follow professional health advice. The usefulness of a school nurse is greatly increased and safeguarded by medical supervision of her work. Cooperation with parents in respect to all aspects of a pupil's welfare is facilitated by the work of an intelligent school physician. The school here described has medical and nursing service, and the report shows extensive adjustments of school practice to meet individual needs which have been discovered by the physician and school authorities in conference (pages 165, 166). In this school, chronically poor health or long-standing defects of ears, eyes, teeth, etc. indicate far more stubborn conditions than the same defects occurring in children in a school with less favorable health attitudes.

A measure of the success of a school is given by the regularity of attendance of its pupils. It is well established that about half of all absences are due to illness—at the secondary level, principally

minor respiratory infections (colds, sore throat, etc.), digestive disturbances, and accidents. Therefore, improved health standards should be reflected in a lesser amount of absence on account of illness. This decrease is partially offset by increased willingness on the part of pupils to stay at home with colds, but studies have repeatedly shown that this practice tends to reduce total absenteeism.

On the side of success in furthering pupils' general welfare and happiness, every study of youthful delinquency emphasizes that school truancy is one of the earliest phases of misbehavior and that it is often a child's reaction to his own failure or unhappiness in the school situation. Therefore a low rate of absenteeism indicates something of a school's success in making a curriculum which is adapted to the student body and in governing the school community in a humane and civilized manner.

The figures on absences quoted for Wilson Junior High School are therefore of interest and significance (page 166). They are somewhat lower than those given by the Hagerstown Studies of the U.S.P.H.S., but that might be accounted for by the fact that these pupils are older than the Hagerstown group, by climatic differences, by more favorable economic status. The Wilson figures show no reliable differences between boys and girls, between entering students and those in the graduating group. In other studies, boys have had higher truancy rates, but the girls' higher illness rates have overbalanced the boys' tendency to truancy, giving much higher absenteeism in girls. The excess (of about one-fourth) of absenteeism in the spring over the fall is to be expected, probably due to the increased amount of absence on account of illness which many careful studies have found to occur in the spring term.

In school accounting of pupils, different schools adopt many different practices; these yield statistics which are not comparable. This accounting is used principally to establish a basis for per capita financing of the school. When comparable data can be obtained, the success or failure of schools and communities in furthering the welfare of the children served can be estimated in terms of school attendance. At present, we do not know how much is average, little, or excessive absenteeism.

In studying any pupil, his absence record should be considered in the light of the local school's average absenteeism for his sex and grade. Health,

school success and social adjustment are probably more faithfully mirrored in the attendance history of a pupil than in any other single set of data. It is also true that "absence" is the most frequent reason given by teachers for a pupil's failure in a school subject; it is easily observed that there is a marked social dislocation of a pupil who has been long absent. He tends to "drop out of things," just as do ailing adults. Sometimes these social and scholastic consequences of absence are serious enough to start a train of misfortunes in a youngster's personal affairs. Some school provision for special care of pupils returning after illness is good insurance against such catastrophes and at the same time makes the teacher's task easier.

Evidence of the health status of the student body is given in the summary of defects found by physical examination of entering low seventh grade pupils and of changes shown by a second examination made the following semester (page 166). Defects of vision stand out most prominently; and only a small percentage are corrected within the first year in secondary school. This is in harmony with findings in New York City schools. Ear defects are not so numerous, and better progress is made in dealing with them. Teeth are better cared for than most surveys of school children show; but they show positive deterioration, expressed in increase of number of cavities during the year. *Cleanliness* and *regularity* show marked improvement. This emphasizes our ignorance as to the cause of tooth decay; and is in harmony with those studies which report deterioration of teeth at time of puberty.

In studying any pupil in this school, the observer needs to keep in mind that visual defect is a common handicap and the prospect of remedying it properly is not bright; that the pupil with hearing loss is definitely in the minority, though there is a better chance of getting help for him; and that these pupils apparently are able and willing to purchase fairly adequate dental care.

ESTIMATION OF SCHOOL INFLUENCES: SOCIAL COMPOSITION

The effort to understand how a youngster feels about himself and his family, how much security and confidence his family background has given him has at best a deal of guesswork in it; but it is certain that information about race, nationality,

occupation, and marital status of the whole group of parents is essential to any interpretation of these facts in respect to one family. Two or three Negroes in a high school of 1,200 white children and teachers were observed to be mildly interesting to the white pupils, were accepted with good grace as classmates and permitted to share in student performances as far as their talents enabled them to do so. When their number increased to 100 or more, the situation changed markedly to the disadvantage of the Negro group. It is conceivable, on the other hand, that the child of a family broken by divorce might find his situation more tolerable were he in a school where there was a large contingent of children similarly circumstanced. Any reader can supply from his own experience similar observations of mass-action phenomena in social groups.

The pupil population of Wilson Junior High School is overwhelmingly of native-born white parentage (page 166). The few representatives of other countries and races are not subjected to social disfavor on this account; on the other hand, they are likely to be more interesting to their fellows because of their different backgrounds. But they are likely also to suffer lack of social support for their family ways, standards, habits; and there is ample evidence that this situation leads to lack of harmony between the old and the new generations and to failure of the young to give allegiance to any standards of behavior not imposed by force.

The occupations of fathers afford our most easily available index to socioeconomic status, though we know this index to have become far from infallible during the depression. The numerical distribution of occupations of the parent population in this school is high in the professions and in business classifications (page 167). It is low in the classes of artisans and common laborers. There is little evidence of wealth; the largest single group, the salesmen, are notably unstable as to earnings and future prospects. The group as a whole is enterprising, skilled, ambitious, financially not too comfortable, but well above the threat of poverty.

The report on marital status of parents shows 12 per cent broken homes, nearly as many by divorce or separation as by death (page 166). Studies made in urban high schools (ninth to twelfth grades) elsewhere show about 20 per cent broken homes; in elementary schools the percentage is lower. These homes are therefore probably

to be judged as more stable than those that would be found in most junior high school parent populations. Lack of great wealth or dire poverty are factors associated in many studies with family stability.

Another easily obtained set of data relates to the gainful employment of these pupils. This should be supplemented by knowledge of their home tasks. We know from an earlier study (see page 52) that pupils of this school spend on an average about an hour a day in home tasks, that the great majority of them have such tasks, and that the tasks are mostly routine chores, uninteresting and offering little opportunity for initiative and independence. But in their performance these children share in the business of making a home and in most cases are glad to feel themselves useful, if they think about it at all.

There is not much gainful employment for youngsters when grown men and youths are idle by the million. But these boys and girls are ingenious and have picked up odd jobs of many kinds, about one-fourth of the whole group having earned something during the fall 1937 (page 168). The record for fall, 1933, at the bottom of the depression, shows about the same number earning. Before the depression, there were many more caddies among the older boys; these jobs are now fewer, held by youths or young men.

The age group under discussion is universally recognized as much given to group affiliations;

there seems to be no reason to regard this interest in clubs and gangs and lodges as peculiar to the adolescent, however. There is ample evidence that adults are even more given to "joining" than adolescents. Some nonschool organizations, including churches, scouting, etc. make provision for supervised play groups; many secondary schools maintain an elaborate "extracurricular program" for the same purpose. In general, the fact of a youngster's belonging or not belonging to such a play group should be interpreted in the light of his opportunities to belong.

The descriptions of school clubs and other social groups in Wilson Junior High School show that in this school pupils have opportunity to belong to groups with variety of interests, that school authorities recognize these as important and valuable, and that in general the environment favors membership in these organizations and participation in "activities" (page 165). Yet not all the students of this school are included in these groups. That is, under the most favorable school circumstances, some young people do not join any organized group, do not take part in any "activity."

No report is available for this student population as to participation in nonschool organizations. Such information is a valuable supplement to knowledge of school group participation. However, experience shows that the pupils who do not participate in school activities tend not to participate in these other clubs.

DESCRIPTION OF WILSON JUNIOR HIGH SCHOOL AGE-GRADE TABLE

Age	7		8		9		Total
	L	H	L	H	L	H	
9-3 to 9-8							
9-9 12-2							
10-3 10-8	3						3
10-9 11-2	6						6
11-3 11-8	62	2		1			65
11-9 12-2	88	26	6	1	1		122
12-3 12-8	14	67	23	2			106
12-9 13-2	8	34	90	28	13		171
13-3 13-8	1	10	43	67	27	3	151
13-9 14-2	1	3	7	19	76	15	121
14-3 14-8			3	14	35	68	120
14-9 15-2				1	19	36	56
15-3 15-8				1	6	11	18
15-9 16-2						4	4
16-3 16-8						1	1
16-9 17-2							
17-3 17-8							
17-9 18-2							
Total	183	142	172	132	177	138	944

A RECORD OF THE SCHOOLS FROM WHICH STUDENTS WERE DRAWN
Fall, 1987

	No. students	No. schools
Same city.....	729	27
Adjoining city.....	98	14
Private schools.....	6	6
Parochial schools.....	16	8
Other schools in the county.....	22	10
Other counties in the state.....	40	31
Other states.....	29	27
Other countries.....	4	4
Total.....	944	127

TEST RESULTS AS OF H 6 GRADE FOR ALL PUPILS, WILSON JUNIOR HIGH SCHOOL
Mental Age in Months

	Range	Q ₁	M	Q ₃
L 7	115-180	127	146	152
H 7	109-200	138	147	155
L 8	117-189	140	149	155
H 8	124-184	141	147	156
L 9	109-195	137	147	155
H 9	106-198	138	143	152

Intelligence Quotient

	Range	Q ₁	M	Q ₃
L 7	85-132	95	105	110
H 7	72-143	96	100	111
L 8	84-136	97	103	111
H 8	83-127	98	104	111
L 9	74-138	97	104	112
H 9	68-135	95	102	108

Reading Age in Months

	Range	Q ₁	M	Q ₃
L 7	112-210	143	161	182
H 7	103-216	144	154	187
L 8	120-200	147	159	179
H 8	126-208	146	161	184
L 9	109-202	142	157	178
H 9	103-221	139	151	169

TESTS USED

- In H 6 Kuhlman-Anderson Test of Mental Ability; Stanford Reading Achievement.
- In L 7 Stanford Arithmetic Achievement.
- In H 7 Stanford Arithmetic Achievement.
- In H 8 Saugren-Woody Reading.
- In special or remedial reading: Gates Diagnostic in Reading
- In special or remedial arithmetic: Compass Diagnostic in Arithmetic.
- In special handwriting: Ayres Scale.
- In H 9 Stanford Test of Mental Ability.
- In H 9 Stanford Reading Achievement.

In any grade, Stanford Revision of the Binet-Simon Intelligence Test, when school authorities are in doubt as to the adequacy of other test results.

THE CURRICULUM OF WILSON JUNIOR HIGH SCHOOL

The curriculum is planned to offer opportunity for the fullest possible development of each pupil, considering, of course, the social group of which he is part. This means that an effort has been made to select and require certain essential subject matter. It also means that opportunities are offered for the pursuit of special interests and abilities. Provision is made for drill on fundamentals. The health of the pupil is safeguarded by health and safety instruction in various grades and classes and health service. An effort is made to secure a balance between the more and the less formal or "activity" units of the daily program. All parts of the program are flexible; even "required" subjects may be dropped if need arises.

Grade	Required subjects	Elective subjects
L 7	English Orientation Arithmetic Singing Woodshop Foods Physical Education	Special Reading Special Arithmetic Special Writing Junior Explorers Orchestra
H 7	English Life Science Arithmetic Art Metal Shop Clothing Physical Education	Same as L 7
L 8, H 8	English Social studies and science Physical Education	Special Reading Special Arithmetic Special Writing Art Crafts Creative Writing Dramatics Vocal and Instrumental Music French Latin Spanish Shops, if space is available Clothing, if space is available Junior Explorers Girls' Interests
L 9, H 9	English Physical Education	See L 8, H 8 list Also General Arithmetic Algebra Science Ancient History Foods Clothing Shops Study Hall or Club

SCHOLARSHIP MARKS

The following system of grading is used: A—excellent, B—good, C—average, D—passing, F—failing, Inc.—incomplete (not a term mark; indicates absence due to illness). Few F's are given.

CLASSIFICATION

In L 7, pupils are classified alphabetically. Above L 7 they are shifted on the basis of friend-

ships. They list the people they wish to work with and are placed accordingly. The object is a grouping of people who are socially of the same degree of maturity.

SCHOOL CITIZENSHIP

In general, students are very cooperative. Most problems arise in the large classes, where individual needs cannot be well met. Lack of equipment for working with children who deviate from the majority of the group in some respect causes certain problems. There is little truancy, perhaps 20 individual cases during a semester. An effort is made to diagnose the reasons for maladjustment and to use the curriculum to supply treatment. Parent and teacher cooperation is sought. Appeal is also made to the pupils' growing ability to assume responsibility for their own salvation.

STUDENT GOVERNMENT

Students share the responsibility for school government. Student counselors are elected in one set of classes. They meet weekly at a council meeting, presided over by the student-body president. The vice-president and secretary also attend the meeting. There are student-body committees which manage halls, yards, dances, lost and found, etc. Forty students control the halls, 20 boys are Traffic Squad officers, and about 60 students act as helpers in physical education, library, and offices. There are glee clubs of about 180, two orchestras, a special art club, and an aesthetic dancing group. The L 9-H 9 Club meetings are also opportunities for social gatherings.

Extracurricular activities are largely incorporated in the regular program. There are however, several groups of Girl Scouts, Camp Fire Girls, Girl Reserves, Boy Scouts. There is a chess club; occasionally, a stamp club.

HEALTH PROGRAM

The health program is presided over by a committee of teachers. A health instruction program, including teaching in many classes, bulletins, and personal conferences, is carried on. There is a health service program, including provision for rest periods, health surveys, case conferences; cumulative records of absences due to illness etc. function constantly.

The physician's hours are on alternate Mondays and Thursdays from 8:30 to 11:30. The nurses'

hours are on Monday and Thursday, all day; Tuesday, Wednesday, and Friday, part of the day.

Immediate follow-up is made on all recommendations of the physician. Health-survey recommendations are carried out within the semester in which they are made. New students are given an immediate routine survey by the doctor in grades where class surveys are not made. Typical adjustments made by the school on the physician's recommendations are: change of school program; change of home program; change of diet; reference to family physician; health instruction in selected classes or individually by doctor or nurse; reference to clinic; reference to school physician; reference to counselor for Binet (individual intelligence test); reference to counselor for complete information concerning school adjustments before action is taken; reference to teachers for observation before action is taken; checking cumulative absences over designated period before action is taken.

PERCENTAGE OF TOTAL ENROLLMENT
IN ATTENDANCE, 1936-1937

Grade	Fall		Spring		Average No. of days absent per pupil	
	Boys	Girls	Boys	Girls		
L 7	93	96	95	93	Fall term	4.8
H 7	94	93	93	94	Spring term	5.7
L 8	95	92	95	94		
H 8	90	94	93	93		
L 9	95	93	92	95		
H 9	95	95	96	94		

REPORT OF HEALTH SURVEYS OF LOW 7, SPRING,
1937, AND OF SAME GROUP, FALL, 1937

Spring, 1937	L 7	Fall, 1937	H 7
Eyes:		Eyes:	
Apparently normal	41 %	Apparently normal	48 %
Slight defect	38 %	Slight defect	34 %
Severe defect	16 %	Severe defect	13 %
No report	5 %	No report	5 %
Ears:		Ears:	
Apparently normal	81 %	Apparently normal	86 %
Slight defect	3 %	Slight defect	5 %
Severe defect	6 %	Severe defect	2 %
No report	10 %	No report	7 %
Teeth:		Teeth:	
Cavities		Cavities	
None	71 %	None	57 %
A few	14 %	A few	24 %
Many	10 %	Many	12 %
No report	5 %	No report	3 %

REPORT OF HEALTH SURVEYS OF LOW 7, SPRING,
1937, AND OF SAME GROUP, FALL, 1937.—(Continued)

Spring, 1937	L 7	Fall, 1937	H 7
Teeth:		Teeth:	
Cleanliness		Cleanliness	
Clean	73 %	Clean	65 %
Slightly dirty	15 %	Slightly dirty	24 %
Very dirty	6 %	Very dirty	5 %
No report	6 %	No report	6 %
Teeth:		Teeth:	
Irregular		Irregular	
Apparently normal	66 %	Apparently normal	79 %
Slight defect	20 %	Defective	16 %
Severe defect	4 %		
No report	10 %	No report	5 %
		Nose and throat:	
		Apparently normal	60 %
		Slight defect	25 %
		Severe defect	7 %
		No report	8 %

INFORMATION CONCERNING HOMES
NATIONALITY OF PARENTS

	Per cent
Both parents United States birth.....	68
One parent United States birth.....	16
Other parent	
British Isles.....	5
Central Europe.....	1.5
Canada.....	2.0
North Europe.....	1.5
Southern Europe.....	2.0
Mexico.....	1.0
Unspecified.....	4.0
	Per cent
Both parents, foreign birth.....	7
Same country.....	7
Southern Europe.....	2.3
British Isles and Canada.....	2.3
Central Europe.....	1.0
Asia.....	0.4
Northern Europe.....	1.0
Different countries	2
Unspecified	7

HOME STATUS

	Per cent
Broken homes.....	5.4
Both parents deceased.....	0.3
One parent deceased.....	6.3
Complete homes.....	88.0

OCCUPATIONS OF FATHER, FALL, 1937

Class	Percentage	Class	Percentage
Artisan.....	4.6	Accountants	
Architect		Miscellaneous	
Artist		Public service.....	11.5
Baker		State, Federal employees	
Florist		Fire Department	
Printer		Police Department	
Tailor		Post Office Department	
Agricultural.....	0.4	Army and navy	
Retired.....	1.2	Teachers, professors	
Machine.....	11.2	Press and radio	
Engineers		Personal service.....	1.4
Machinists		Barber	
Miscellaneous		Undertaker	
Transportation and communication.....	8.2	Store owners or employees.....	8.1
Railway and shipping		Upholstery	
Delivery and bus		Jewelry	
Miscellaneous		Butchers	
Building.....	8.0	Laundry	
Carpenter		Store or restaurant owners or employees	
Painter		Druggists	
Electrician		Motion picture	
Contractors or builders		Professions.....	4.9
Plumber		Law	
Miscellaneous		Medicine	
Manufacturing.....	14.3	Dentistry	
Factory foreman or employee		Ministry	
Oil Company employees		Salesmen.....	13.4
Auto repairing		General	
Employers or wholesalers		Real estate	
Common laborers.....	2.4	Insurance	
White collar workers.....	7.9	Stock and bond	
Office employees		Unclassified or unspecified.....	4.8
Bankers			

SUMMARY OF EMPLOYMENT OF PUPILS, FALL, 1937

	L 7	H 7	L 8	H 8	L 9	H 9
Paper route.....	9	3	14	11	15	15
Take care of children.....	4	3	7	5	9	7
Work in garage or service station.....	1	1	..	2	1	1
Sell magazines.....	14	8	5	2	2	
Errands and odd jobs.....	3	..	2	1		
Work in store.....	2	..	2	..	1	3
Mowing lawns.....	2	11	3	6	3	4
Dishwashing.....	1	1				
Deliver circulars.....	1	1	1	2	6	7
Shine shoes.....	1					
Sweep walks.....	1					
Housework.....	1	1	..	1	1	
Teach dancing.....	..	1				
Take care of animals.....	..	1				
Work in Junior Explorers.....	..	..	1			
Clerical work.....	..	..	..	3	2	
Cafeteria.....	..	..	..	1	1	1
Make things to sell.....	..	..	..	1		
Apprentice cameraman on newspaper.....	..	..	..	1		
Give out balloons.....	..	..	..	1		
Keep teachers' room in order.....	..	..	..	1	1	
Play piano.....	..	..	..	1		
Chop wood.....	..	..	..	..	1	
Sell programs at games.....	..	..	..	..	1	
Deliver company.....	..	..	..	..	3	2
Photographical work.....	..	..	..	..	1	
Work in undertaking parlor.....	..	..	..	..	1	
Soda fountain.....	..	..	..	..	1	1
Plumbing.....	..	..	..	..	..	1
Janitor work.....	..	..	..	..	..	1
Teach music.....	..	..	..	..	..	1
Caddy.....	..	..	..	..	..	1
Total.....	46	31	35	39	50	45
Total in fall, 1933.....	45	40	28	34	34	36

DESCRIPTION OF LINCOLN SENIOR HIGH SCHOOL AGE-GRADE TABLE

Total Population, Fall, 1934

Age		Grade								Total	Totals			Percentages			
		10		11		12		P.G.			Accel-erated	Nor-mal	Re-tarded	Accel-erated	Nor-mal	Re-tarded	
		L	H	L	H	L	H	L	H								
12-9 to 13-2		2								2	2				100		
13-3 to 13-8		2	1							3	3				100		
13-9 to 14-2		24	5							29	29				100		
14-3 to 14-8		58	9	8						75	75				100		
14-9 to 15-2		114	49	25	3	3	2			196	82	114		42	58		
15-3 to 15-8		108	85	60	8	5	3			269	76	193		28	72		
15-9 to 16-2		48	64	132	38	16	6	1		305	61	196	48	20	64	16	
16-3 to 16-8		21	39	88	70	46	15			279	61	158	60	22	57	21	
16-9 to 17-2		4	16	51	48	85	30	4		238	34	133	71	14	56	30	
17-3 to 17-8		3	7	22	17	65	42	8		164	8	107	49	5	65	30	
17-9 to 18-2		2	2	4	8	32	41	10		99		51	48		52	48	
18-3 to 18-8				1	4	16	26	12		59		12	47		20	80	
18-9 to 19-2				1		5	7	2		15			15			100	
19-3 to 19-8				1		2	6	4		13			13			100	
19-9 to 20-2						1	1	3		5			5			100	
20-3 to 20-8				1			1	1		3			3			100	
20-9 to 21-2				1		1		1		3			3			100	
Total		386	277	395	196	277	180	46		1757							
Totals	Accelerated	86	64	93	49	70	56	13			431						
	Normal	222	149	220	118	150	83	22				964					
	Retarded	78	64	82	29	57	41	11					362				
Percentages	Accelerated	22	23	24	25	25	31	28						24			
	Normal	58	54	55	60	54	46	48							55		
	Retarded	20	23	21	15	21	23	24									21

Faculty (Fall, 1934)

Teachers and administrators.....	100
Student teachers.....	300

Junior High Schools from Which Students Were Drawn (Fall, 1934)

	Number of Students
Same city (15 schools).....	1,196
Adjoining city (4 schools).....	357
Private schools.....	9
State School for the Blind.....	10
Parochial.....	23
Other schools in county.....	35
Other counties in state.....	45
Other states.....	35
Other countries (Canada, France).....	4
Unspecified.....	8
Total.....	1,722

Psychometric Tests Used.

Intelligence Tests: All Low 10 students are given a Terman Group test. If there seems to be indication that any student does not fit happily into his group, a Stanford Binet test is given to obtain a better understanding of his ability and inclination.

Achievement Tests: In fall, 1934, Stanford Reading Tests were given to all Low 10 students. Students entering Low 10 in spring, 1934 were given this test while in the High 9, thus making possible a wiser grouping for Low 10 English classes.

Intelligence-quotient Distribution

	L 10		H 10		L 11		H 11		L 12		H 12	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Range.....	76-145	74-158	77-136	73-137	72-145	65-147	82-137	71-133	74-141	76-137	78-145	79-144
Q ₁	99	96	95	96	96	98	100	99	98	95	99	95
Median.....	109	108	107	108	109	105	106	106	107	106	106	105
Q ₃	118	116	119	119	120	114	115	115	114	115	114	119

Reading-age Range: Q₁ 15-6; M 16-6; Q₃ 17-0

Required Subjects: State requirements include health instruction and physical education daily, American history and civics, and written and oral English to mastery. Local requirements are subject to change from year to year.

Subjects Offered:

Art: Art, Mechanical Drawing, Crafts, Stagecraft.

Commercial: Economic Geography, Typing, Shorthand, Note taking, Business Arithmetic, Bookkeeping, Business Correspondence, Office Training, Law, Salesmanship.

English: English, Creative Writing, News, Public Speaking, World Literature, Dramatics, Grammar, Dramatic Workshop.

Home Economics: Clothing, Foods, Modern Dress, Home Problems.

Languages: French, Spanish, German, Latin.

Mathematics: Algebra, Geometry, Algebraic Theory, Trigonometry, Social and Economic Arithmetic, Solid Geometry, Analytic Geometry.

Music: Choral, Harmony, Orchestra, Band, Piano, Glees, A Capella Choir, Dance Orchestra, Voice Culture.

Physical Education or R.O.T.C. required.

Science: Biology, Applied Biology, Physiology, Chemistry, Physical World, Physics.

Shop: Cabinet, Metal, Printing.

Social Studies: World History, American History, Civics, Social Problems, Political Problems, Economics, Current History.

Interdepartmental courses, in which all students in any grade are enrolled:

L 10 Personal Management, Physical Education.

H 10 Social Living, Physical Education.

L 11 American Institutions, Physical Education, and one course elected from the following:

a. Modern History (for those having had Modern History 1 and 2). Deals with European background of American History.

b. American "E." General American History from explorers to present day. Chronological treatment.

c. American "C." From Civil War to present time. Treatment similar to "E."

d. American "P." Problems of today traced back to origin, preceded by brief general survey of American History.

e. American "R." Readings in American History, biography, etc., designed for slow readers and those needing special attention because of reading difficulties.

H 11 Social Problems or Political Problems or Economic Problems, Physical Education.

L 12 Four courses to choose from (listed below) and Physical Education.

a. Contemporary Problems.

b. (1) Psychology. Almost entirely of applied type, psychology of everyday affairs.

(2) Psychology "R" for those who took American "R." Largely guidance, adjustment.

c. Consumer Education.

d. Humanities: appreciation of literature emphasized but attention given to art, music, drama. Visits to art exhibits, concerts, lectures.

H 12 Now under consideration. Will probably be a large number of courses from which to select for the purpose of rounding out special interests and abilities. Physical Education.

"X" courses in various subjects are modified to meet the needs of students for more general courses or to fulfill minimum requirements.

Scholarship reports are issued three times each semester. The marks have the following meanings: A—excellent; B—good; C—average; D—barely passing; F—failure. If need arises, a special scholarship report is taken by the student to his teachers; on it he receives marks which indicate to all concerned the progress which he is making.

Teachers fill out deficiency blanks for all students to whom they give "incompletes" or F's. On these blanks they state the contributing causes for the information of the counselors. In physical education the five-point marking system has been discarded: students are marked either "S" (satisfactory) or "U" (unsatisfactory). In some classes, notably one physiology section and the personal management classes, the same practice is followed. The reason for doing this is to reduce the emphasis upon marking.

Percentage Distribution of Marks for Term Ending June, 1936

Department	A	B	C	D	F	Inc.
Art.....	26.8	51.8	17.2	1.9	1.2	1.1
Commerce.....	17.3	33.6	33.1	13.3	2.6	0.1
English.....	28.5	51.6	13.6	4.2	1.6	0.5
German.....	21.3	37.8	26.2	9.8	4.6	0.0
Home Economics.....	23.9	32.4	32.8	8.8	1.2	0.9
Latin.....	18.7	44.4	25.2	7.6	2.9	1.2
Leisure Interests.....	27.3	50.0	22.7	0.0	0.0	0.0
Mathematics.....	17.0	41.3	29.5	8.9	2.5	0.8
Music.....	30.7	47.4	15.0	4.2	2.2	0.5
Personal Management.....	19.4	43.0	52.6	5.0	7.0	0.0
Romance Languages.....	21.4	41.2	26.0	7.9	2.1	1.4
R.O.T.C.....	45.3	34.3	10.2	5.1	5.1	0.0
Science.....	16.6	38.7	31.4	10.8	1.8	0.7
Shop.....	18.4	44.4	32.0	2.9	2.3	0.0
Social Living.....	19.4	38.0	28.2	12.0	1.9	0.5
Social Studies.....	25.4	39.0	21.6	10.5	3.3	0.2
School as a Whole.....	22.4	41.8	24.8	8.1	2.4	0.5

	Satisfactory	Unsatisfactory	Incomplete
Boys' Physical Education.....	94.0	4.9	1.1
Girls' Physical Education.....	96.1	1.8	2.1

Average Number of Days' Absence per Pupil per Term

Grade	Spring term		Fall term	
	Boys	Girls	Boys	Girls
10	4	5	5	5
11	6	8	5	5
12	6	8	7	7

Health Program:

Doctor: Physician for girls $\frac{1}{2}$ day per week, for boys 1 day every 2 weeks.

Duties: Examination of students indicated by teachers, of returning absentees, members of athletic teams, students suffering injuries and disabilities; and health conference with school administration.

Nurse: None at school. There is a nurse on call, in the employment of the school department, who makes visits as follow-up of health-case conference, on request of vice-principal.

Teacher in charge of health-adjustment room coordinates the program.

Health Status of Students, Fall, 1934

Disease	Percentage of Absence Resulting			
	September	October	November	December
Respiratory infections.....	59	44	54	60
Digestive disturbances.....	13	16	14	9
Other ailments.....	28	40	32	31

Individual Modifications of School Program.

Half-day sessions, extra rest either at home or in the health-adjustment room, mid-morning lunch, late permits to class, extra sets of books for home use, seating adjustments, minimized reading and writing, reduced program, modification of extra-curricular activities are a few of the many ways in which the programs are made to fit the varying capabilities of the students.

Health Instruction.

Biology and Physiology classes, Home Economics, Civics, Physical Education, Chemistry, Physics, Art, Music, English, and Social Problems classes all contribute to health instruction. The health-adjustment room, while modifying the school routine to fit the physical needs of the child, serves as a practical and direct health lesson.

School Citizenship.

The most serious problems of discipline are those which occur outside the boundary of the school grounds but under the jurisdiction of the school. These are of such a nature, in the rare instances in which they occur, as to indicate lack of consideration of both people and property. Cases of serious nature are few in number.

Truancy is not frequent. It may usually be ascribed to desire for adventure. It occurs more frequently in the tenth grade than later and involves chiefly boys of 15 and 16 years. Most cases are single offences of not more than 1 day's duration. The rate of truancy shows a relation to progress of the school term and seems to be related to antisocial attitudes and actions. Each case is analyzed and such adjustment made as is indicated by the facts assembled.

Many problems which at one time would have been termed disciplinary are closely allied to problems of health, financial handicap, social life, home responsibility, and inferior intelligence.

Each must be met according to its nature. The teacher, the child, and the vice-principal share in the solution of any difficulty arising. Detention is not used as general discipline. It may be indicated in case of long-continued carelessness as to attendance or may be employed by individual teachers in their class management. The most constructive help in dealing with problems is sympathetic relationship between the home, school, and the child. Upon occasion, connection is made with the Juvenile Probation Office, which emphasizes for the erring pupil the attitude of the public toward antisocial members.

Student affairs are managed by the Student Council, working in close connection with the Boys' League and Girls' League, which are presided over by the commissioners of boys' affairs and of girls' affairs respectively. These in turn have close contacts with class and club organizations. Each student group has a teacher adviser.

Nationality of Parents

	Num-	Per-
	ber	cent
Both parents United States birth.....	923	52
One parent United States birth.....	180	10
Other parent		
Great Britain.....	78	
Northern Europe.....	22	
Central Europe.....	42	
Southern Europe.....	21	
Southeast Europe.....	1	
Eastern Europe.....	6	
Asia, Africa, and South America....	5	
Unspecified.....	459	26
	Num-	Per-
	ber	cent
Both parents, foreign birth.....	218	12
Same country		
Great Britain.....	49	
Northern Europe.....	23	

	Num- Per her cent		Per cent
Central Europe.....	30	Great Britain; Australia.....	1
Southern Europe.....	44	Great Britain; South America.....	1
Southeast Europe.....	6	Northern Europe; Central Europe...	3
Eastern Europe.....	17	Northern Europe; Eastern Europe...	1
Asia, Africa, and South America....	26	Central Europe; Eastern Europe....	2
Different country		Central Europe; Southern Europe...	4
Great Britain; Northern Europe....	2	Eastern Europe; Southeast Europe..	1
Great Britain; Eastern Europe.....	3	Eastern Europe; South America.....	1

Occupations of Parents

	Boys (875)		Girls (882)	
	Father	Mother	Father	Mother
Professional.....	127	19	135	21
Semiprofessional.....	43	4	14	0
Commercial.....	151	24	185	23
Clerical.....	34	9	30	7
Managerial.....	34	6	40	3
Merchant proprietor.....	43	5	33	1
Public service.....	23	2	15	0
Agriculture.....	6	0	10	0
Retired.....	12	0	9	0
Skilled trades.....	80	8	95	9
Transportation.....	13	1	12	0
Building trades.....	46	0	44	0
Miscellaneous manufacturing and mechanical.....	52	2	37	2
Common labor.....	23	1	37	4
Personal service.....	18	18	25	21
Printing.....	7	0	7	1
Miners, lumbermen, fishermen.....	7	0	3	0
No occupation given.....	70	740	63	721

Characteristics of Homes

	Boys	Percentage	Girls	Percentage
Children living in complete homes.....	672	75	678	76
Children in homes broken by death.....	104	12	77	9
Children in homes broken by separation or divorce.....	74	8	96	11
Children living with others than parents.....	37	4	38	4

Percentage of Children Having Brothers and Sisters

	None	Brothers		Sisters	
		1	2 or more	1	2 or more
Boys.....	48	20	7	18	7
Girls.....	46	20	7	20	7

Percentage of Children Having Regular Home Jobs

	None		Specific		Odd jobs	
	L 10	Whole school	L 10	Whole school	L 10	Whole school
Boys.....	15	25	83	74	2	1
Girls.....	10	16	88	83	2	1

Pupils Gainfully Employed
(Boys 32 per cent; Girls 6 per cent)

Grade	Boys	Girls	No. employed	Type of job
L 10	176	210	62 boys 15 girls	Paper routes 37, odd jobs 13, gardening 2, store 10. Child care 8, store 2, housework 2, odd jobs 3.
H 10	135	142	45 boys 9 girls	Paper route 17, odd jobs 13, gardening 8, store 7. Child care 5, housework 2, store 1, office 1.
L 11	213	182	43 boys 11 girls	Paper route 19, odd jobs 12, gardening 5, store 7. Child care 7, store 2, odd jobs 2.
H 11	103	93	44 boys 8 girls	Paper route 20, odd jobs 11, gardening 6, store 7. Child care 2, housework 3, store 1, office 2.
L 12	130	147	52 boys 3 girls	Paper route 21, odd jobs 12, gardening 2, store 17. Odd jobs 2, child care 1.
H 12	94	86	33 boys 6 girls	Paper route 5, odd jobs 7, gardening 3, store 18. Child care 1, housework 1, store 2, office 2.

STUDYING CHILDREN IN SCHOOL

Future Plans of 1,757 Students, Fall, 1934

Educational	L 10		H 10		L 11		H 11		L 12		H 12		Total		Grand total	Percentage
	B	G	B	G	B	G	B	G	B	G	B	G	B	G		
West Point.....	0	0	0	0	1	0	0	0	1	0	0	0	12	0	12	0.6
Annapolis.....	2	0	1	0	4	0	1	0	1	0	1	0				
University.....	96	88	80	59	88	72	65	46	59	56	43	21	431	342	773	43.0
Junior college.....	0	0	0	0	3	0	1	0	1	0	0	2	5	2	7	0.4
Teachers college.....	0	3	0	2	2	7	0	1	0	5	0	2	2	20	22	1.0
Art school.....	3	9	1	6	2	5	0	5	1	6	1	0	8	31	39	2.0
Business college.....	5	35	4	21	5	26	5	19	5	16	4	14	28	131	159	9.0
Trade school.....	4	3	3	4	4	3	1	0	3	0	2	1	17	11	28	2.0
Nursing school.....	0	3	0	2	0	3	0	2	0	2	0	0	0	12	12	0.6
Postgraduate.....	0	0	0	0	1	1	2	0	3	0	1	2	7	3	10	0.5
Undecided.....	55	42	46	50	57	37	34	40	27	22	22	17	241	208	449	26.0
No record.....															246	15.0
Vocational	L 10		H 10		L 11		H 11		L 12		H 12		Total		Grand total	Percentage
	B	G	B	G	B	G	B	G	B	G	B	G	B	G		
Professional.....	71	42	39	29	44	31	37	19	32	26	23	7	246	154	400	23.0
Commercial.....	24	66	15	37	12	44	11	34	12	29	11	25	85	235	320	18.0
Agriculture.....	7	2	3	0	3	0	2	0	0	0	1	0	16	2	18	1.0
Aviation.....	9	0	2	0	1	1	1	0	1	0	0	0	14	1	15	0.8
Arts.....	6	13	5	11	3	12	1	11	3	10	1	2	19	59	78	4.0
Trades.....	11	26	7	16	5	19	6	11	4	6	2	7	35	86	121	7.0
Miscellaneous.....	0	3	6	4	17	2	1	4	7	4	5	2	36	19	55	3.0
Undecided.....	39	28	61	45	82	50	48	36	42	34	29	16	301	209	510	29.0
No record.....															240	15.0

Relation of School to Homes.

Parent-teacher organization: Membership 200.

The parents of tenth grade students visit school as a result of special invitation. Parents also visit school on their own initiative, either for their own information or regarding health or other problems of their children.

A staff of seven counselors visit homes of tenth grade students in connection with a special study now in progress.

The attendance secretary makes home visits to check on absentees, and the nurse, who is on call in that school district, makes about one visit per week.

Relation of School to Community.

Many boys are placed with local firms, through personal contact established by one of the vice-principals with the employer. "Vocational Day," which occurs once each semester, is the occasion for men and women representatives of various professions to come to the school and speak to groups of students regarding various phases of their profession. Students sign up for attendance in the group which most interests them.

Relations with health centers are most frequent, and there are many relations with the recreation department and the county charities. An effort is made to help the students meet school expenses by providing opportunity for earning.

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